

CAMDEN COUNTY

1986

CAMDEN COUNTY LAND USE UPDATE

Prepared by the Camden County Planning Board
with assistance from the Albermarle Commission

COASTAL ZONE
INFORMATION CENTER

Approved Conditionally by CRC
on November 1987

Final Approval Given by CRC
on July 29, 1988

HD
211
.N8
N563
1986

Preparation of this document was financed in part through a grant provided by the North Carolina Management Program through funds provided by the Coastal Zone Management Act of 1972 as amended, which is administered by the Office of Ocean and Coastal Resources Management, National Oceanic and Atmospheric Administration

North Carolina Coastal Zone Management Program

1986
CAMDEN LAND USE PLAN UPDATE

Camden County Board of Commissioners

J.C. Rountree, Chairman of the Board

Samuel Shaw
Paul DeBerry

H.C."Clay" Ferebee
Sumner K. Midgett

Property of CSC Library

U.S. DEPARTMENT OF COMMERCE NOAA
COASTAL SERVICES CENTER
2234 SOUTH HOBSON AVENUE
CHARLESTON, SC 29405-2413

Camden County Planning Board

Randy Williams, Chairman of the Board

Emory Upton
Fred Upton

HD211.N8 N563 1986
191 08726

SEP 1 1989

Table of Contents

ESTABLISHMENT OF INFORMATION BASE.....	1
GOALS ESTABLISHED DURING THE 1980 LAND USE PLANNING PROCESS.....	1
RESOURCE PROTECTION GOALS/ACCOMPLISHMENTS.....	1
RESOURCE PRODUCTION GOALS/ACCOMPLISHMENTS.....	3
ECONOMIC AND COMMUNITY DEVELOPMENT	
GOALS/ACCOMPLISHMENTS.....	4
CONTINUING CITIZENS PARTICIPATION.....	5
OTHER POLICIES/ACCOMPLISHMENTS.....	6
PRESENT CONDITIONS.....	7
POPULATION COMPOSITION.....	9
RACIAL COMPOSITION.....	9
AGE GROUPS.....	10
SCHOOL AGE.....	11
FAMILY-FORMING AGE GROUP.....	11
POTENTIAL LABOR FORCE.....	11
LABOR PARTICIPATION.....	12
ELDERLY.....	12
DEPENDENCY GROUP.....	13
SEX DISTRIBUTION.....	14
ECONOMY.....	15
TOTAL COUNTY OUTPUT.....	16
LAND AND CAPITAL.....	17
LABOR.....	18
PROFITS.....	19
SOCIAL SECURITY.....	20
OUTPUT SUMMARY.....	20
TOTAL PERSONAL INCOME.....	21
EMPLOYMENT.....	22
CAMDEN COUNTY LABOR FORCE GROWTH AND COMPOSITION: 1977-1983.....	22
COMMUTING PATTERNS 1970 - 1980.....	23
ENTREPRENEURSHIP.....	24
RETAIL SALES.....	24
EXISTING LAND USE.....	25
DEVELOPMENT PATTERNS AND DEVELOPMENT TRENDS.....	25
LAND USE COMPATIBILITY PROBLEMS.....	26
MAJOR PROBLEMS RESULTING FROM UNPLANNED GROWTH.....	26
AREAS LIKELY TO EXPERIENCE MAJOR LAND USE CHANGES.....	27
RESIDENTIAL LAND USE.....	28
HOUSING CONDITIONS.....	28
COMMERCIAL LAND USE.....	30
INDUSTRIAL LAND USES.....	30
FOREST LANDS.....	30
AGRICULTURAL LANDS.....	30
COMMERCIAL AND RECREATIONAL FISHING.....	31
HISTORICAL AND CULTURAL RESOURCES.....	31
HISTORICAL AND CULTURAL RESOURCES MAP.....	32
EXISTING LAND USE MAP.....	33
POLICY:AREAS OF ENVIRONMENTAL CONCERN:.....	36
CONSTRAINTS TO DEVELOPMENT.....	42
SOILS.....	42
SOIL ASSOCIATIONS.....	42

SOIL LIMITATIONS	43
DRAINAGE CLASSIFICATIONS.....	44
SEPTIC TANK LIMITATIONS	45
SUMMARY OF CHARACTERISTICS	46
SOIL EROSION.....	46
CAMDEN COUNTY: SHORELINE EROSION.....	47
WATER RESOURCES	48
WATER SUPPLY	48
WATER BUDGET.....	48
PRECIPITATION.....	49
EVAPOTRANSPIRATION	49
OUTFLOW.....	50
SURFACE WATER.....	51
MAN MADE HAZARDS.....	51
PHYSIOGRAPHY.....	51
TOPOGRAPHY	52
DRAINAGE.....	52
GEOLOGY.....	52
CONTINUING PUBLIC PARTICIPATION IN PLANNING MATTERS.....	56
POLICY ISSUES: RESOURCE PROTECTION	57
ISSUE: SOIL LIMITATIONS.....	57
ISSUE: PROTECTION OF POTABLE WATER SUPPLY	57
ISSUE: INDUSTRIAL IMPACT ON FRAGILE AREAS	58
ISSUE: STORMWATER RUN-OFF: RESIDENTIAL DEVELOPMENT.....	59
ISSUE: STORMWATER RUN-OFF: AGRICULTURAL.....	59
ISSUE: MANMADE HAZARDS	60
ISSUE: CULTURAL OR HISTORICAL RESOURCES.....	61
ISSUE: FRESH WATER, SWAMPS, AND MARSHES.....	61
ISSUE: SEPTIC TANK LIMITATIONS.....	62
ISSUE: FLOOD PLAINS.....	63
POLICY ISSUES: RESOURCE PRODUCTION.....	64
ISSUE: PRODUCTIVE AGRICULTURAL LANDS.....	64
ISSUE: COMMERCIAL FOREST LAND.....	64
ISSUE: COMMERCIAL AND RECREATIONAL FISHING	65
ISSUE: RESIDENTIAL AND COMMERCIAL LAND DEVELOPMENT.....	65
ISSUE: INDUSTRIAL DEVELOPMENT IMPACT ON ANY RESOURCE	66
ISSUE: PEAT OR PHOSPHATE MINING IMPACT ON ANY RESOURCE.....	66
ISSUE: OFF ROAD VEHICLES.....	66
ISSUE: MARINA AND FLOATING HOME DEVELOPMENT.....	67
POLICY ISSUES: ECONOMIC AND COMMUNITY DEVELOPMENT.....	68
ISSUE: TYPES AND LOCATION OF INDUSTRY	68
ISSUE: TYPES OF URBAN GROWTH PATTERNS DESIRED.....	70
ISSUE: REDEVELOPMENT OF DEVELOPED AREAS.....	71
ISSUE: TOURISM AND WATERFRONT ACCESS.....	72
ISSUE: TYPE OF DENSITIES, LOCATIONS: UNITS PER ACRE ETC.....	73
ISSUE: ENERGY FACILITY SITING AND DEVELOPMENT.....	74
ISSUE: PACKAGE TREATMENT PLANTS.....	74
STORM HAZARD MITIGATION,	76
STORM HAZARD AREA	77
VULNERABILITY.....	77
RISK TABLE FOR HAZARD AREAS	77
MAGNITUDE OF RISK.....	77
EVACUABILITY.....	78

POLICY STATEMENTS: STORM HAZARD MITIGATION	79
POST DISASTER AND RECOVERY PLAN.....	80
PURPOSE:.....	80
ORGANIZATION:.....	80
SUPPORT TEAM:.....	80
SCHEDULE OF ACTIVITIES.....	81
DAMAGE ASSESSMENT.....	81
DAMAGE CLASSIFICATIONS	82
RECONSTRUCTION DEVELOPMENT STANDARDS	82
DEVELOPMENT MORATORIA	82
LAND CLASSIFICATION SYSTEM AND MAP:CAMDEN COUNTY.....	84
Land Classification Map.....	84
Land Classes	84
Developed:.....	84
Transition:.....	84
Rural Service:.....	85
Conservation:.....	85
INTER-GOVERNMENTAL COORDINATION.....	87
APPENDIX 1 SAMPLE QUESTIONNAIRE AND SURVEY SUMMARY.....	88
APPENDIX II ARCHAEOLOGICALLY SENSITIVE AREAS.....	92

ESTABLISHMENT OF INFORMATION BASE

During the 1980 planning process, the county adopted a set of general goals concerning Resource Protection, Resource Production, and Economic and Community Development. The information contained in the *1980 Land Use Plan* provided the starting point for this 1986 planning process. In 1980, goals, policies, strategies were adopted for resource protection, resource production, and economic and community development issues; specific policies were adopted for Citizens Participation, Mobile Homes, and Second-Home Waterfront Development. The following is an assesment of the county's effort in attaining the adopted goals of the *1980 Land Use Plan* and of the effectiveness of the adopted policies.

Goals Established During the 1980 Land Use Planning Process

Resource Protection Goals

"Safeguard and perpetuate the biological, social, economic and aesthetic value of the County's Areas of Environmental Concern in accordance with CAMA regulations."
Camden County 1980-1990 Land Use Plan; Executive Summary,
Terry Alford, Planning and Design Associates, 1980

"Protect areas subject to excessive shoreline erosion through encouraging proper placement, density, and type of development in shoreline areas." (Alford, 1980)

"Protect areas prone to severe flooding through undertaking a detailed flood hazard study, revising the zoning ordinance, and considering establishment of a floodplain ordinance." (Alford, 1980)

"Direct development with proper consideration of soils, through working with the District Health Department regarding septic tank limitations and with the Albemarle Soil and Water Conservation District for preliminary plat review." (Alford, 1980)

Accomplishments

Additional local legislation was adopted for controlling development in flood plain areas.

The county zoning map and local health codes achieve this goal.

In 1986, the county adopted a model FEMA flood plain ordinance.

Since the 1980 plan, the local health district has adopted and is enforcing more stringent septic tank placement regulations that are directly contingent on soil suitability.

"Appropriately minimize the drainage and clearing of wooded swamps and their conversion to other uses through classifying wooded swamps as 'local resource protection districts' in the zoning ordinance, developing permits for drainage requiring setback of development from wooded swamps, and requiring adequate erosion control practice near them." (Alford, 1980)

"Protect remnant species and their habitats through establishing local 'resource protection districts' for such identified areas and allowing no public works projects to be constructed within them, other than light recreation facilities." (Alford, 1980)

"Guide development so that it protects historic and potential historic properties and perpetuates the county's cultural heritage through enforcing all applicable laws regarding archeological and historic sites, promoting federal investment benefits to private owners of historic properties, considering a local tax incentive, and considering a countywide survey of historic sites and properties." (Alford, 1980)

"Minimize the adverse impact of man-made hazards upon humans and adjacent development through a volunteer improvement/demolition program, use of state building code, establishment of buffer zones near hazards, and requiring clear warnings at such sites." (Alford, 1980)

Other than the policies included in the *1980 Land Use Plan*, the county has passed no local legislation to regulate drainage or clearing of wooded swamps or of their conversion. Federal regulations concerning clearing of swamps (swamp-buster law) and the decline in profitability of many farm products have greatly reduced any conversion or clearing of swamp lands.

No local legislation or county actions since 1980 have addressed this policy.

No local legislation has been adopted that addresses historic or cultural resources. The county has invested in the restoration of the old Camden County Jail, and is now using the structure as the tax supervisors office.

No local legislation has been adopted that addresses this issue.

"Increase readiness for safe evacuation from hurricane or flood disaster through increasing awareness and conducting a practice exercise under the county's hurricane evacuation plan." (Alford, 1980)

The county has adopted an Emergency Evacuation Plan that is coordinated with Pasquotank County and Elizabeth City. No practice exercises have been held; however, the plan was put into action with hurricane Gloria.

Resource Production Goals

Accomplishments

"Achieve maximum sustained yields from agriculturally productive areas through improved local agricultural management techniques and limiting conversion of prime agricultural land to other uses." (Alford, 1980)

No local legislation has been adopted that addresses this issue.

"Achieve maximum sustained yields from forest resources through education of forest owners and establishing financial rewards and other incentives for good management practices, limiting the conversion of wooded land to other less productive uses, and establishing markets for local products." (Alford, 1980)

No local legislation has been adopted that addresses this issue.

"Develop geological-mineral and energy resources (sand, gravel, and peat) in a manner consistent with other development goals, particularly related to AEC's and agricultural/forestation by developing local standards and instituting a county severance tax." (Alford, 1980)

No local legislation has been adopted that addresses this issue.

"Increase productivity of recreational resources, including touring through identifying areas of development of tourist facilities, supporting resurrection of the State Dismal Swamp Master Plan, supporting development of public or private access points to public areas, and establishing easements." (Alford, 1980)

The City of Elizabeth City is now developing a public access area along the Pasquotank River in Camden County; Camden County has applied for state assistance to develop a public access area in the southern portion of the county.

Camden County, along with other counties and municipalities in Region R, is participating in the staffing and operations of a Tourist Welcome Center to be located in Camden County adjacent to the Dismal Swamp Canal near South Mills. The Welcome Center will serve automobile traffic along US 17 and boat traffic along the Canal

Economic and Community Development Goals

Accomplishments

"Achieve level, types and patterns of economic and community development which are consistent with the historic character of the County, raise local employment levels, and otherwise contribute to the economic base, so as to implement the Land Classification Map." (Alford, 1980)

No local legislation has been adopted that addresses this issue.

"Encourage location of light industry which meets established performance standards, near existing communities, and which does not use prime agricultural land." (Alford, 1980)

No local legislation has been adopted that addresses this issue.

"Provide significant forms of local commitment toward providing services to development including the South Mills Water Association, preparing a preliminary capital improvements budget, identifying particular state and federal programs, and working to establish a 'partnership' with private land owners toward achievement of development goals." (Alford, 1980)

Camden County has entered into a contract with the South Mills Water District whereby the South Mills Water District is using the county's Senate Bill 2 allocation to expand their water service.

"Promote development pattern stipulated by the Land Classification Map, in accordance with the zoning ordinance, and near existing development. (Alford, 1980)

"Promote redevelopment of existing communities, primarily those designated as 'transition' and 'community' on the Land Classification Map, through participating in a regional development effort, obtaining technical assistance in working with local businesses, undertaking selective measures to improve the housing stock, designating local 'revitalization areas' for priority attention, and working to have local legislators improve the access to South Mills from Highway 17." (Alford, 1980)

"Selectively support state and federal programs related to Camden County through engaging in a grantsmanship program." (Alford, 1980)

"Achieve appropriate levels of energy facilities through revising the zoning ordinance to require a special use permit to construct such facilities, and undertake a feasibility study for a local gasohol production co-op in the county." (Alford, 1980)

Development decisions made by the local planning board are being made in accordance with local development ordinances.

The county has prepared a housing condition survey and inventory of the entire county that identifies and prioritizes areas in need of redevelopment. Grant applications have been prepared for the redevelopment of the Bloodfield Road community in South Mills.

Highway 17 access to South Mills has been improved.

The county is actively pursuing available grant assistance from state and federal sources.

No local legislation has been adopted that addresses this issue.

Continuing Citizen Participation Policies

"Provide opportunities for participation in the land use planning process by residents individually and through representative groups." (Alford, 1980)

Accomplishments

Public notices are published for all meetings of the county planning board.

"Educate citizens about issues facing the area regarding protection, production, and development policies through presentations to civic groups, school classes, newspaper releases, and workshops." (Alford, 1980)

Other Policies

"Accept the mobile home as a reasonable form of standard housing and make its use in the county as appropriate as possible through providing for mobile home development in designated areas and revising the zoning ordinance and subdivision regulation provisions for mobile homes so as to better implement plan recommendations." (Alford, 1980)

"Direct development of second home/waterfront development appropriately through revising the zoning ordinance to promote concentration rather than sprawl of such development, paying close attention to CAMA regulations regarding estuarine shorelines, and developing districts and construction criteria for such development." (Alford, 1980)

No formal or ongoing citizen education system has been put in place.

Accomplishments

County subdivision regulations have been revised to clarify the procedure for permitting mobile home parks. Mobile homes are not restricted from single family subdivision developments.

No local legislation has been adopted that addresses this issue.

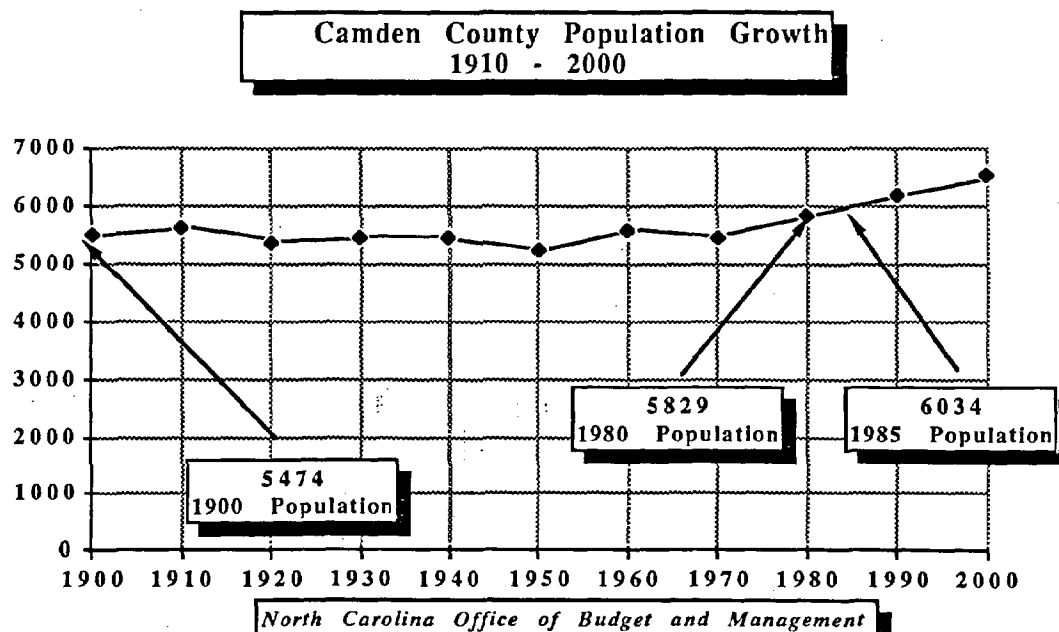
PRESENT CONDITIONS

POPULATION

Since 1900, population growth in Camden County has been rather erratic. Except for the twenty-year period from 1930 to 1950, when the county experienced two consecutive decades of population decline, the county's population has alternately declined or increased in successive census periods. The greatest population in the county during this century was the 5,829 persons recorded in 1980, the most recent census year. The lowest population of this century was recorded in 1950, when only 5,223 persons were counted.

Regardless of the ups and downs, the county's population has remained rather stable with a minimum to maximum range of 606 persons over the eighty-year period. Population estimates and projections prepared by the N.C. Department of Budget and Management indicate a period of moderate but sustained population growth for the remainder of this decade and into the next century. The table below demonstrates Camden County's fluctuating growth pattern.

POPULATION CHANGE: CAMDEN COUNTY 1900 - 2000 (projected)

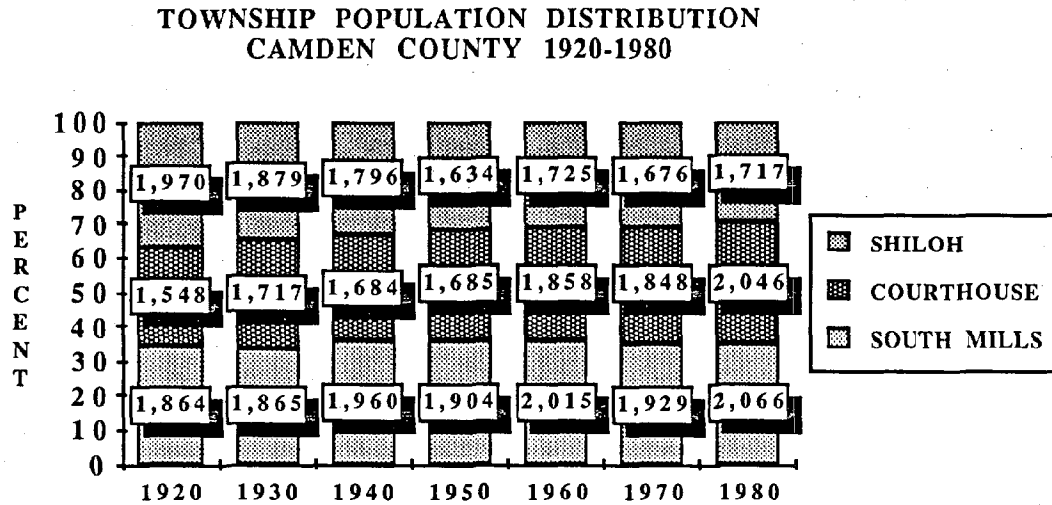


Source: U.S. Bureau of the Census, Census of the Population: North Carolina, 1910-1980.

GEOGRAPHIC DISTRIBUTION

While the county's population is fairly evenly distributed among the three townships in the county, there has been a slight but noticeable shift in settlement patterns. Since 1910, the Shiloh township, which occupies approximately the southern third of the county, has shown a consistent decline in population and in its proportion of the county population. On the other hand, the Courthouse township, which occupies the middle third of the county, has shown a consistent pattern of growth in both actual population and in its

proportional share of the county. The South Mills township has maintained a consistent, roughly one-third



share of the county's population. Both the South Mills and the Courthouse townships are served by major U.S. Highways: U.S. 17 serves South Mills and U.S. 158 serves Courthouse township. Inferior highway access is probably limiting the growth in the Shiloh township.

CAMDEN COUNTY POPULATION BY TOWNSHIP: 1910 - 1980

	South Mills		Courthouse		Shiloh		Camden County
Year	pop.	(%)	pop	(%)	pop (%)		pop (100%)
1920	1864	(34.6)	1548	(28.8)	1970	(36.6)	5382
1930	1865	(34.2)	1717	(31.4)	1879	(34.4)	5461
1940	1960	(36.0)	1684	(31.0)	1796	(33.0)	5440
1950	1904	(36.4)	1685	(32.3)	1634	(31.3)	5223
1960	2015	(36.0)	1858	(33.2)	1725	(30.8)	5598
1970	1929	(35.4)	1848	(33.9)	1676	(30.7)	5453
1980	2066	(35.4)	2046	(35.1)	1717	(29.4)	5829

Source: U.S. Bureau of the Census, Census of the Population

POPULATION COMPOSITION

As is shown in the sections that follow, there are some significant and noticeable trends developing in the composition of Camden County's population. The number of residents who are 60 years of age or greater continues to increase and to account for a greater share of the population. The number of school age residents has generally remained static and is projected to continue this trend into the near future. The number of females participating in the labor force is declining, thus running counter to the national trend of greater female participation.

The sections that follow present information on the following specific components of the county's population: racial composition, age group distributions, labor force composition, sex distribution, and household composition.

RACIAL COMPOSITION

The non-white population is declining in both its proportion of the population and in absolute numbers. In 1970, non-white residents accounted for 37.2% of the county population and numbered 2027 persons; by 1980, the number of non-white residents had diminished to slightly less than 33% of the county population and numbered only 1897 persons. Projections provided by the N.C. Department of Budget and Management indicate that this trend will continue at least through the five-year period covered by this document. The 1990 projections estimate that only 1798 non-whites will reside in Camden County and will account for slightly more than 29% of the county population. The N.C. Department of Budget and Management accounts for this projected decline of the non-whites by a projected out-migration of 11.3%.

CAMDEN COUNTY

RACIAL COMPOSITION OF THE POPULATION: 1970-1990

	1970	% of tot.	1980	% of tot.	1985	% of tot.	1990	% of tot.
WHITE	3426	(62.8)	3932	(67.5)	4159	(68.9)	4383	(70.9)
BLACK	2019	(37.0)	1876	(32.2)	na	na	na	na
OTHER	8	(0.2)	21	(0.3)	1875	(31.1)	1798	(29.1)
TOTAL	5453	(100.0)	5829	(100.0)	6034	(100.0)	6181	(100.0)

Source: N. C. State Office of Budget and Management

AGE GROUPS

The following sections discuss those age segments of the population that generally require special or more frequent types of services both from the private and from the governmental sectors and that in their own way create certain types of development and service demands.

The age groups discussed here are as follows:

The School Age (5-19 year old sector)

This group naturally creates the demand for educational and recreational facilities and services.

The Family Forming Group (15-35 year old sector)

This group is generally responsible for new household formations and new offspring, thus creating demands for new housing facilities and forming the base for future internal population growth.

The Potential Labor Force (16 years and older)

This group is usually responsible for all the goods and services produced in an area; however, not everyone in this group participates in the work force.

The Elderly (65 years or older)

This group spans the greatest number of years and could be segmented further into additional age groups ranging from aged to infirm, with each having very specialized and critical needs.

The Dependency Sector (under 16 and over 65)

This group, only generally, measures those persons who are considered dependent on someone else for the major portion of their personal needs and economic support. There are, of course, persons under 16 years of age and over 65 that are self-sufficient; however, they generally are not numerous. There are also many persons not in these age groups that are, in some ways at least, dependent on outside support.

SCHOOL AGE

Projections indicate a continued decline in the school-age population cohorts (5 to 19 years old) during the planning period. The persons in this cohort numbered 1743 in 1970; by 1980, the number of school age children had declined to just 1529 persons and is estimated to be only 1266 by 1990. The table below shows the number of persons within the age group and the group's percentage share of the total population.

CAMDEN COUNTY SCHOOL-AGE COHORTS:1970-1990

COHORT	1970 (%)	1980 (%)	1985 (%)	1990 (%)
5YRS - 9	604 (34.6)	437 (28.6)	420 (32.2)	421 (33.3)
10 - 14	636 (36.5)	524 (34.3)	423 (32.4)	450 (35.5)
15 - 19	503 (28.9)	568 (37.1)	461 (35.4)	395 (31.2)
TOTAL	1743 (100.)	1529 (100.)	1304 (100.)	1266 (100.)

Source: N. C. State Office of Budget and Management

FAMILY-FORMING AGE GROUP

This cohort showed positive and substantial growth during the 1970 to 1980 decade. Present population estimates projections for the future indicate only modest growth after 1980 and a projected decline by 1990.

CAMDEN COUNTY FAMILY FORMING COHORT: 1970-1990

COHORT	1970 % of	1980 % of	1985 % of	1990 % of
15-24yrs.	850 (58.9)	1068 (57.9)	939 (50.2)	800 (44.9)
25-34yrs.	592 (41.1)	777 (42.1)	933 (49.8)	980 (55.1)
TOTAL	1442 (100.)	1845 (100.)	1872 (100.)	1780 (100.)

Source: N. C. State Office of Budget and Management

POTENTIAL LABOR FORCE

The potential labor force generally includes all persons over 16 years of age. Of course, not all of these persons actually participate in the workforce. Many are enrolled in school; many are over 65 years of age and are retired; many are physically unable due to handicaps or poor health; and many, particularly in agricultural areas such as Camden County, are females who work on the farm or in the home but are not counted as participating in the labor force.

The potential labor force in Camden County grew at a much faster rate during the past census decade than did the population as a whole; the population increased by only 6.9% while the potential labor force increased by more than 18%. The 16-years-or-older group accounted for 66.5% of the 1970 population of Camden County and numbered 3628 persons. By 1980, this group accounted for 74.4% of the county's population and numbered 4338 persons. By 1990, the potential labor force is projected to increase to 4752 persons and 76.9% of the population.

CAMDEN COUNTY POTENTIAL LABOR FORCE: 1970-1990

COHORT	1970	% of	1980	% of	1985	% of	1990	% of
16-64yrs.	3042	(83.8)	3645	(84.0)	3863	(83.8)	3946	(83.0)
65 and older	586	(16.2)	693	(16.0)	752	(16.2)	806	(17.0)
TOTAL	3628	(100.)	4338	(100.)	4615	(100.)	4752	(100.)

Source: N. C. State Office of Budget and Management

LABOR PARTICIPATION

Labor force participation did not, however, keep up with this growth of potential. The number of persons actually working or seeking employment and living in Camden County increased by only 36 persons or slightly more than 1.5%. The reason for the relative lack of growth among labor force participants is the steep decline in female participation.

Labor participation among male residents increased from 64.4% in 1970 to 70.4% in 1980. Labor participation among females, on the other hand, declined from 57.28% in 1970 to 36.18% in 1980.

The number of females in the labor force actually dropped from 1,090 persons in 1970 to 831 persons in 1980, a reduction of 259 persons or almost 24%. This decline occurred when the number of females in the potential labor force were increasing by 394 persons or by almost 21%. The reduction in female participation in the Camden County labor force counters the national trend toward more females and a greater proportion of women working outside of the home.

CAMDEN COUNTY CIVILIAN LABOR FORCE PARTICIPATION: 1970-1980

	1970			1980		
	TOTAL	MALE	FEMALE	TOTAL	MALE	FEMALE
Persons 16 yrs. or older	3628	1725	1903	4293	1996	2297
Persons 16 yrs. or older in labor force	2201	1111	1090	2237	1406	831
Labor Participation Rate	60.67	64.41	57.28	52.11	70.44	36.18

Source: 1970 and 1980 Census of the Population

ELDERLY

The elderly age group is the fastest growing segment of the Camden County population. In 1950, this group accounted for only 7.3% of the county's population. By 1980, this group comprised 11.8% of the county population and is projected to increase to 13% of the population by 1990, with the greatest growth occurring in the over-75-years-old segment.

CAMDEN COUNTY ELDERLY: 1970-1990

	1970	% of	1980	% of	1985	% of	1990	% of
65-74	397	(7.3)	433	(7.4)	458	(7.6)	498	(8.1)
75 and older	189	(3.5)	260	(4.4)	294	(4.9)	308	(5.0)
TOTAL	586	(10.7)	693	(11.8)	752	(12.5)	806	(13.0)

Source: N. C. State Office of Budget and Management

DEPENDENCY GROUP

The dependency group is the population sector that typically derives a major portion of its economic support from sources other than direct participation in the labor force. For the most part, this group includes dependent children under 16 years of age and persons over 65 years who are retired and draw a major portion of their income from governmental transfer payments, such as Social Security, and from pension programs. The dependency ratio is the ratio of persons not in these age ranges to those that are.

Theoretically, the lower the dependency ratio the more self sufficient is the area. This measurement provides a general indication of the number of additional persons that must be supported by the overall economy. This measurement, however, usually under counts the number of persons who may be in need of financial assistance or social services since it is based strictly on ages of individuals and not on specific economic or social conditions.

As the table indicates, the number of persons in the dependent age category has been declining steadily since 1970 and is presently at its low ebb. The 1990 projections indicate only a slight increase of two-tenths of a percent of the population in this segment. The dependency ratio indicates that there is approximately one dependent resident for every two non-dependents. This is a decline since 1970 when the ratio was one dependent for every 1.25 non-dependents.

CAMDEN COUNTY DEPENDENCY GROUP: 1970-1990

	1970	% of	1980	% of	1985	% of	1990	% of
0-15	1837	(33.7)	1491	(25.6)	1419	(23.5)	1429	(23.1)
65 and older	586	(10.7)	693	(11.8)	752	(12.5)	806	(13.0)
TOTAL	2423	(44.4)	2184	(37.5)	2171	(36.0)	2235	(36.2)
DEPENDENCY RATIO	0.80:1		0.60:1		0.56:1		0.56:1	

Source: Base population counts from N. C. Office of Budget and Management

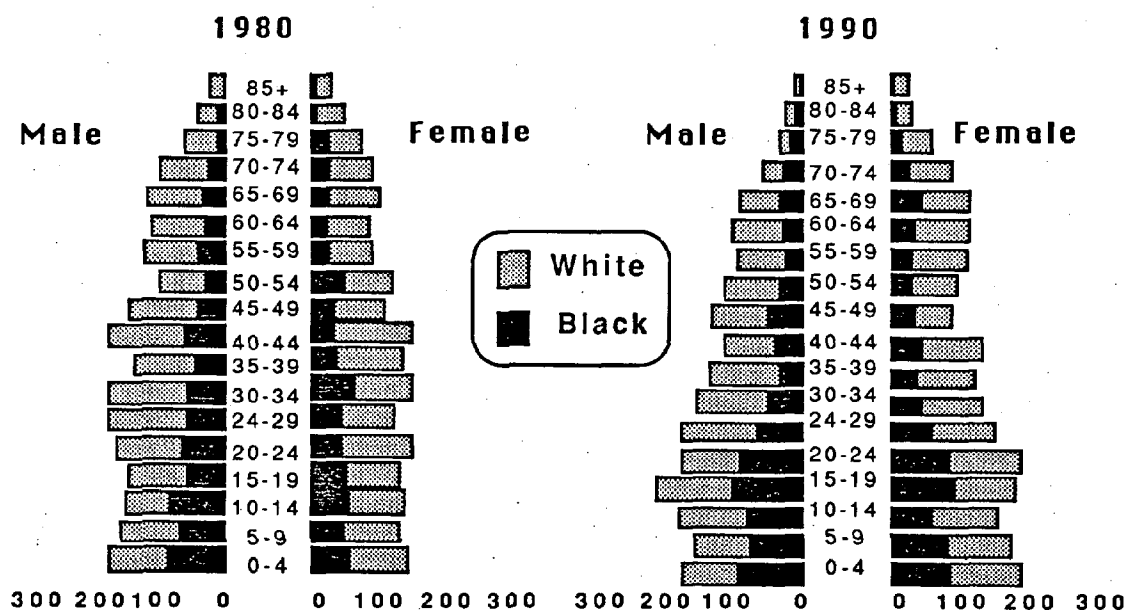
SEX DISTRIBUTION

The ratio of men to women in Camden County is approximately one male to 1.07 females, a percentage population split of 48.5% males and 51.5% females. Population projections from the N.C. Department of Budget and Management indicate a more even distribution by 1990, with males accounting for 49.9% of the population and females for 50.1, very near a 1:1 ratio.

The population pyramids below present an overall view of the Camden County population as it was distributed by race, sex, and age in 1980 and as it is projected to be distributed in 1990.

POPULATION PYRAMIDS: CAMDEN COUNTY 1980-1990

Camden County Population Composition:



ECONOMY

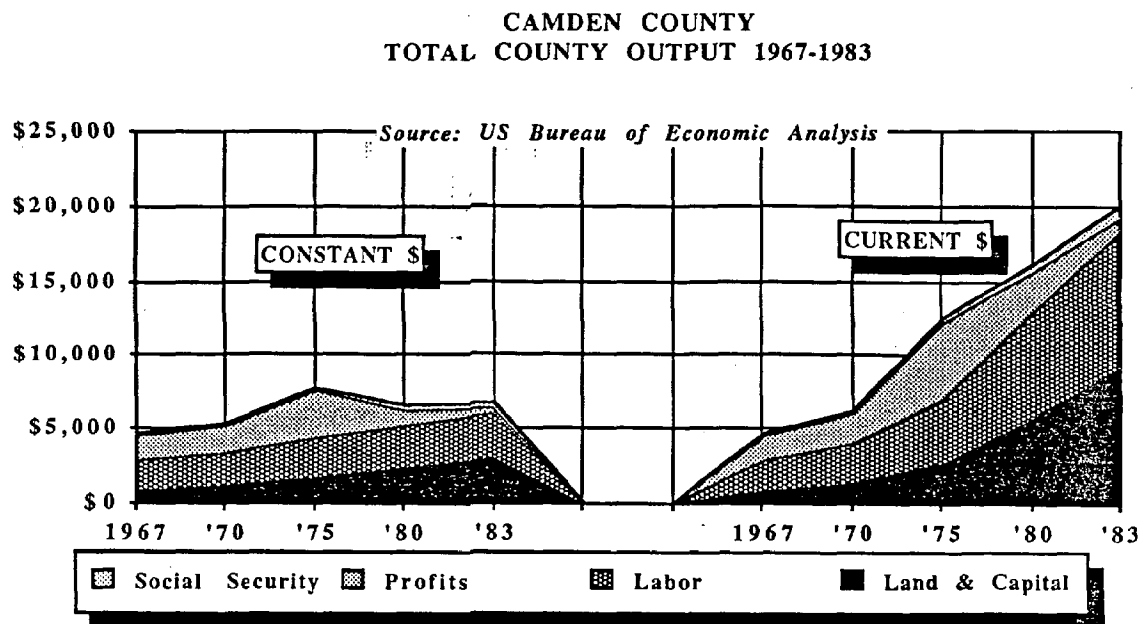
The following section analyzes the Camden County economy in terms of total county output, total personal income, employment, and entrepreneurship.

Total county output is the measurement, in dollars, of the total earnings produced in Camden County and does not include earnings of county residents working outside of the county or payments received by county residents through government transfer payments such as Social Security. The output measurement, however, does include social insurance contributions made by persons working in Camden County and interest, rent, and dividends received by county residents.

The total personal income measure represents all of the income received by residents of Camden County. This measurement includes earnings received by county residents working outside the county and adjustments to earnings of persons working in Camden County but residing outside of the county. Government transfer payments received by residents of the county are counted in the income total, but social security contributions are not.

Employment measurements include labor force growth participation and composition, employment distribution by industry and job classification, the commuting work force, and job growth within the county.

Entrepreneurship is simply the measure of growth in local business activity. This includes the growth in sales in the county, the increase or decrease in business establishments, and new job creation and payroll growth in the local business sector.



Source: US Bureau of Economic Analysis

TOTAL COUNTY OUTPUT

Output of a given area is the sum of all dollars paid to the four factors of production: labor, land, capital, and profits.

$$\text{Labor} + \text{land} + \text{capital} + \text{profits} = \text{TOTAL COUNTY OUTPUT}$$

Labor, land, and capital are consumption factors; and profits are the residual or value added through local entrepreneurial activities. The following sections discuss these four factors and present historic data concerning their growth and the shift in the proportion each contributes to the county's overall production.

The data used in these sections were compiled by the Bureau of Economic Analysis, and are available on an annual basis from 1965 to 1983 and at three-year intervals prior to 1965.

For the purposes of this study, data for the years 1959, 1967, 1970, 1975, 1980, 1983 will be used.

These years roughly approximate five-year intervals for trend identification and include Census years for cross references (1970 & 1980), the latest year for available information (1983), and the earliest year for which Consumer Price Index information is available (1967).

This analysis looks at output data from two perspectives: Total County Output as expressed in current dollars and Total County Output expressed in constant 1967 dollars. Constant dollar measurements describe the value of the total county output in what economists call real terms, because current dollars are adjusted to the purchasing power of dollars in some preceding index year, in this case 1967 dollars. The Consumer Price Index information was provided by the N.C. Office of Budget and Management.

CAMDEN COUNTY:TOTAL COUNTY OUTPUT(CONSTANT DOLLARS)

	1967	1970	1975	1980	1983
Land & Capital	\$923	\$1,219	\$1,740	\$2,370	\$3,126
Labor	\$2,010	\$2,262	\$2,702	\$2,928	\$3,061
Profits	\$1,752	\$1,809	\$3,186	\$1,042	\$329
Social Security	\$123	\$138	\$196	\$207	\$233
Total County Output	\$4,808	\$5,428	\$7,824	\$6,547	\$6,749

CAMDEN COUNTY:TOTAL COUNTY OUTPUT(CURRENT DOLLARS)

	1967	1970	1975	1980	1983
Land & Capital	\$923	\$1,417	\$2,808	\$5,850	\$9,324
Labor	\$2,010	\$2,631	\$4,360	\$7,228	\$9,130
Profits	\$1,752	\$2,104	\$5,141	\$2,572	\$980
Social Security	\$123	\$160	\$317	\$510	\$696
Total County Output	\$4,808	\$6,314	\$12,624	\$16,155	\$20,129

Source: US Bureau of Economic Analysis

The preceding graphs and tables present side-by-side comparisons of the change in Camden County's total county output from 1967 to 1983 as expressed in current and 1967 dollars. As can be seen, there are some striking differences. The double-digit inflation rate in recent years has taken its toll in the purchasing power of the dollar. The total county output expressed in constant dollars is less than half of its current dollar value and less than its constant value in 1975.

The most obvious and notable trends indicated by the data are the greater dependence of the county's output on the land and capital factor and the steep increase and decrease of the profit sector. The labor sector has remained rather constant when viewed in real terms with only a slight gain since 1975.

LAND AND CAPITAL

The Bureau of Economic Analysis provides data on income received in the county that is derived through rents, dividends, and interest. This data is used here as the estimate of land and capital consumed or generated in production in Camden County. There is a separation problem with this data. It is impossible to determine from the data available whether all of the interest, rents, or dividends received as income in the county actually represent the investment of land and capital in the county or investments at some other place. There is also no way to identify the amount of rents and interest used in production in Camden County that is supplied by firms and individuals outside of the county.

For the purposes of this study, it is assumed that a balancing out takes place. The amount of investment coming into the county from non-residents is treated as equal to the amount of rents, interest, and dividends earned by county residents through investments outside of the county, thus making the earnings in the county through this factor equal to the amount consumed in the county's output.

This assumption makes the figures expressed highly questionable, and they should not be viewed as absolutely accurate. They are sufficient, however, to identify trends in the overall county economy in terms of growth and of the changes in compositional factors.

As can be seen in the following table, land and capital have shown the greatest increase of all the production factors. In 1967, the value of the land and capital used in the Camden County output was only \$923,000; by 1983, its value had increased by 910% to \$9,324,000 when measured in current dollars. In real terms, the consumption of land and capital increased somewhat less, but still a substantial 239%, for an average growth rate of 7.9% for each year of the 16-year period from 1967 to 1983.

The growing importance of capital is a world-wide phenomenon and not peculiar to Camden County. Production increases are more and more dependent on the expansion of production facilities and improved technology and equipment which increase land and capital requirements.

LAND AND CAPITAL CONSUMPTION: 1967,1970,1975,1980,1983

INTEREST, RENTS & DIVIDENDS	1967	1970	1975	1980	1983
CURRENT DOLLARS	923	1,417	2,808	5,850	9,324
CONSTANT DOLLARS	923	1,218	1,741	2,370	3,126
TOTAL OUTPUT(current)	4,808	6,312	12,626	16,160	20,130
CAPITAL AS A PERCENT OF TOTAL OUTPUT	19.2	22.4	22.2	36.2	46.3
AVERAGE ANNUAL INCREASE (PERCENT REAL TERMS)		7.9 %			
TOTAL INCREASE: 1967 TO 1983 (PERCENT REAL TERMS)		239 %			

SOURCE: BUREAU OF ECONOMIC ANALYSIS

LABOR

Labor is represented by the total wages and salaries paid to persons working in Camden County. This includes wages earned by persons working, but not living in Camden County. For the purposes of this study, it is assumed that all wages earned in Camden County is from production in the county.

Thus, if a traveling salesman headquartered in Camden County makes sales to other parts of the country of products produced in still other regions of the country, his wage is still counted as Camden County production.

The cost of labor has not been a significant factor in the erosion of the profit factor. In real terms, labor increased by only 2.66% annually between 1967 and 1983. Compositionally labor has not grown significantly: in 1967 labor comprised 41.8% of total county output, and in 1983 it accounted for 45.4%, only a slight increase.

LABOR CONSUMPTION

WAGES AND SALARIES	1967	1970	1975	1980	1983
CURRENT DOLLARS	2010	2631	4360	7228	9130
CONSTANT DOLLARS	2010	2262	2703	2929	3061
TOTAL OUTPUT(current)	4808	6312	12626	16160	20130
LABOR AS A PERCENT OF TOTAL OUTPUT	41.80	41.7	34.5	44.7	45.4
AVERAGE ANNUAL INCREASE (%) (PERCENT REAL TERMS)				2.66 %	
TOTAL INCREASE: 1967 TO 1983 (PERCENT REAL TERMS)		52.3 %			

SOURCE: BUREAU OF ECONOMIC ANALYSIS

PROFITS

The Bureau of Economic Analysis provides data on what is termed proprietor's income. This represents the profits collected by business establishments operating in the county. These profits represent the value added to intermediate products used or traded in local business activities.

The steep up-and-down curve of the profit sector reflects to a great degree the county's reliance on the agricultural-industrial sector as its main source of production. The profit data represent proprietor's earnings, and the major portion of county proprietors are farmers.

The steep upturn in the profit sector from 1965 to 1975 marks the remarkable improvement in the prices paid for farm commodities during that period. This is particularly evident in the 1970 to 1975 time period when farm prices experienced their greatest gains. The steady decline since 1975 reflects the erosion of farm income through the inability of farm prices to keep pace with rising production costs, particularly increased capital costs, such as the increased cost of new machinery and higher interest rates. This cost squeeze creates the need for larger production units and thus increased land costs in the form of land prices and land rents.

The table below presents the same information contained in the previous tables on the changes in production factors and also separates the farm and non-farm proprietors. As can be seen in the table, the value added by entrepreneurial efforts in Camden County has steadily decreased. Total profits are down in both real and current terms. In real terms, profits decreased by an estimated \$772,000 or over 81% from 1967 to 1983. In current terms the decline was still over 44%. Profits fell from a high of almost 50% of total output in 1975 to a low of 4.9% in 1983.

CAMDEN COUNTY

PROFITS (VALUE ADDED)

PROPRIETORS INCOME	1967	1970	1975	1980	1983
CURRENT DOLLARS					
FARM	1090	1,282	4120	1,069	-720
NON FARM	662	822	1,021	1,503	1,700
TOTAL PROFITS	1,752	2,104	5,141	2,572	98
CONSTANT DOLLARS					
FARM	1,090	1,102	2,554	433	-241
NON FARM	662	707	633	609	570
TOTAL PROFITS	1,752	,809	3,187	1,042	329
TOTAL OUTPUT(current)	4,808	6,312	12,626	16,160	20,130

PROFIT AS A PERCENT OF TOTAL OUTPUT	36.4	33.3	49.7	15.9	4.9
--	------	------	------	------	-----

AVERAGE ANNUAL INCREASE (%) -9.93%
(REAL TERMS)

TOTAL INCREASE: 1967 TO 1983
(PERCENT REAL TERMS) -81.2%
(CURRENT TERMS) -44.1%

SOURCE: BUREAU OF ECONOMIC ANALYSIS

SOCIAL SECURITY

Social Security has been included as a separate portion of total county output strictly as an accounting measure. The Bureau of Economic Analysis lists social security as a separate item and does not assign it to the particular output sector (land, capital, labor, and profits) that made the contribution. It obviously represents production so has been included in the total output tables.

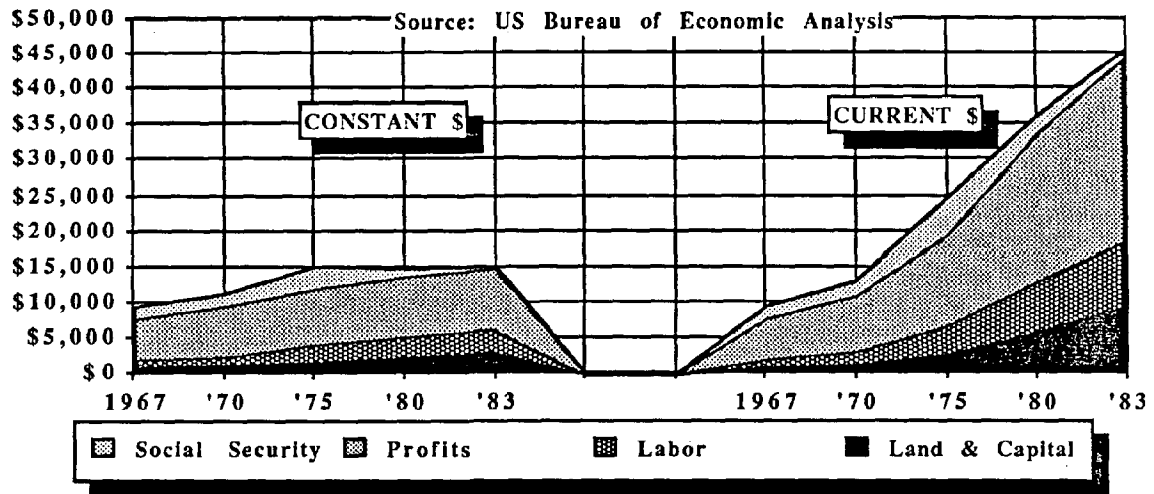
OUTPUT SUMMARY

There has been very little value added as the result of entrepreneurial activities in the county since 1967. Much of the potential profits have been consumed by additional capital costs. A part of the problem is the county's reliance on agriculture as its primary basic industry. Agriculture is an extractive industry as are fishing, forestry, and mining; these industries are extremely volatile and susceptible to international economic trends and technological improvements in production methods and equipment. Farm land represents a finite resource in Camden County which cannot be expanded. Increased production in this sector must rely on increased utilization of this resource either through the cultivation of additional lands presently not in cultivation, increased production from existing lands now being farmed, or improved farm prices for farm commodities. Of these options, improved farm prices offer the greatest possibility of improved county output. This is the one option over which the farmers in Camden County have no control. The cultivation of marginally productive lands generally does not provide any great economic advantage unless accompanied by improved prices.

It is doubtful that any great technological improvement will occur that will give the Camden County farmer an advantage over other farmers in the world. Technological improvements generally provide less productive areas of the world with a better means of competing with the American farmer and generally result in lost jobs in the farming sector, fewer farmers and larger farms, and greater capital requirements.

Increased county output will most likely require less reliance on the agriculture sector and the expansion or introduction of less restricted types of industries, such as manufacturing or wholesale and retail trade. Increased development of tourism and commercial activities in the trade sectors offers the best possibility of taking advantage of the abundant water resources in the area.

**CAMDEN COUNTY
TOTAL PERSONAL INCOME 1967-1983**



TOTAL PERSONAL INCOME

Total personal income is a measure of all income received by residents of Camden County, regardless of where it is produced. These figures include earnings of residents commuting to work outside of the county and government transfer payments, such as social security or military retirement pensions. These two categories of income are added to the total county output data to provide the total income. Deducted from this total are the earnings of non-resident wage earners working in Camden County and social security contributions. The data on income are presented in a similar form as that of total county output with comparisons of income in constant as well as current dollars.

CAMDEN COUNTY:TOTAL PERSONAL INCOME(CONSTANT DOLLARS)

	1967	1970	1975	1980	1983
Interest, Dividends & Rents	\$923	\$1,219	\$1,740	\$2,370	\$3,126
Transfer payments	\$1,127	\$1,344	\$2,462	\$2,841	\$3,144
Salaries & Wages	\$5,492	\$6,834	\$7,792	\$8,500	\$8,633
Proprietors Income	\$1,752	\$1,809	\$3,187	\$1,042	\$329
Total County Income	\$9,294	\$11,206	\$15,181	\$14,753	\$15,232

CAMDEN COUNTY:TOTAL PERSONAL INCOME(CURRENT DOLLARS)

	1967	1970	1975	1980	1983
Interest, Dividends & Rents	\$923	\$1,417	\$2,808	\$5,850	\$9,324
Transfer payments	\$1,127	\$1,563	\$3,972	\$7,011	\$9,379
Salaries & Wages	\$5,492	\$7,948	\$12,568	\$20,979	\$25,752
Proprietors Income	\$1,752	\$2,104	\$5,141	\$2,572	\$980
Total County Income	\$9,294	\$13,036	\$24,495	\$36,403	\$45,429

EMPLOYMENT

Employment in Camden County remained almost constant between 1977 and 1983. The County's civilian labor force grew by only 10 persons, and the number of residents employed grew by a like amount. The only really bright outlook in the Camden County employment picture is that more of the resident labor force are finding jobs in the county. The proportion of Camden residents commuting to work outside of the county steadily declined during this time period. The number of new jobs in the county increased from 450 in 1977 to 630 in 1983, a 42% increase. The labor sectors showing the greatest gains in jobs in the county were: manufacturing, up 75%; wholesale and retail trade, up 211%; services, up 100%; and government up 20%.

CAMDEN COUNTY LABOR FORCE GROWTH AND COMPOSITION: 1977-1983

	1977	1979	19787	1980	1981	1982	1983
CIVILIAN LABOR FORCE	2520	2500	2550	2540	2550	2530	2560
EMPLOYED	2370	2390	2410	2360	2340	2360	2360
IN COUNTY	450	530	560	580	620	590	630
OUT OF TOWN	1920	1860	1850	1780	1720	1770	1730
UNEMPLOYED	220	210	190	170	160	160	140
UNEMPLOYMENT RATE(%)	6.0%	4.4%	5.5%	7.1%	8.2%	6.7%	7.8%
PERCENT EMPLOYED							
OUT OF COUNTY	81.0%	77.8%	76.7%	75.4%	73.5%	75.0%	73.3%
IN COUNTY	19.0%	22.2%	23.3%	24.6%	26.5%	25.0%	26.7%

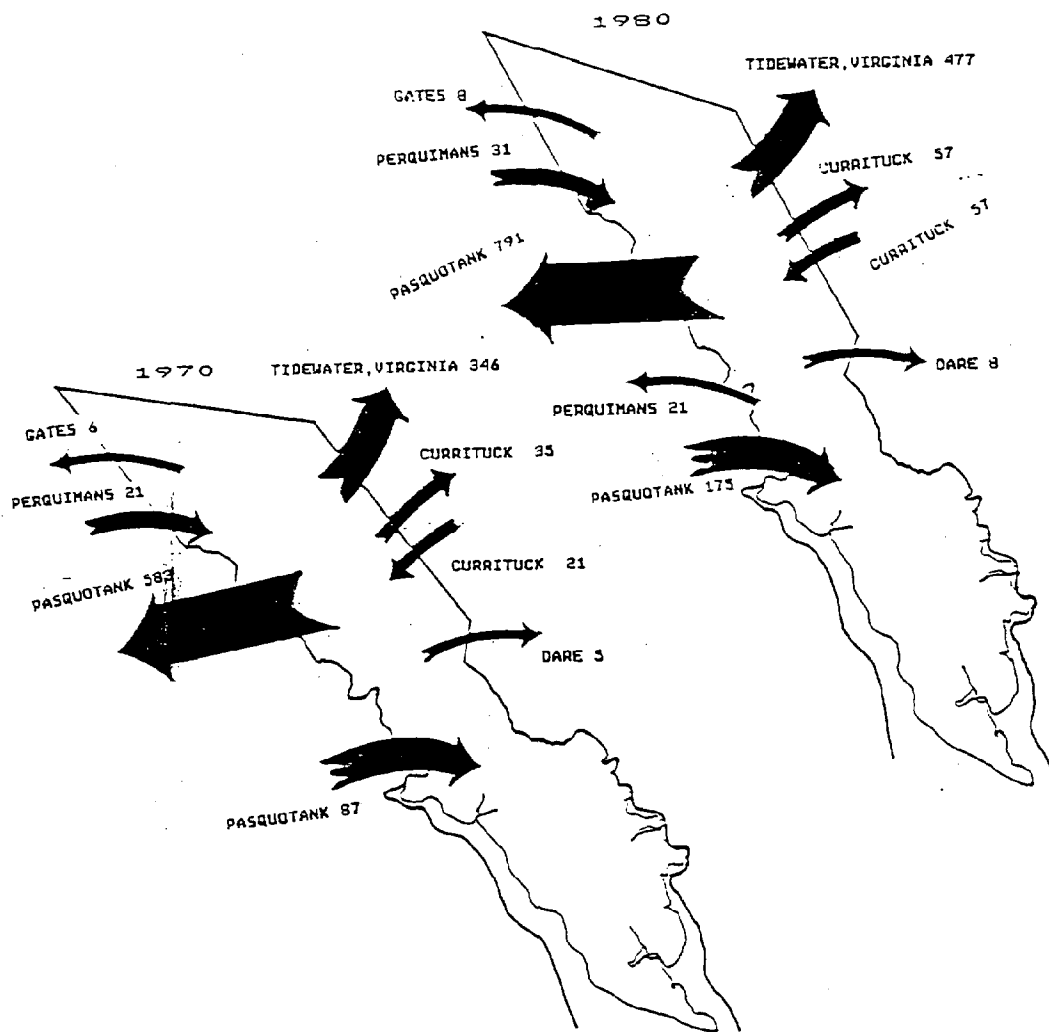
EMPLOYMENT BY PLACE OF WORK

	1977	1978	1979	1980	1981	1982	1983
MANUFACTURING	40	40	50	60	60	50	70
CONSTRUCTION	70	70	60	50	40	40	60
TRANSPORTATION	20	20	20	20	20	10	10
TRADE	90	140	130	150	200	210	190
FINANCE, INSURANCE, REAL ESTATE	0	0	0	0	0	0	0
SERVICE	30	40	50	50	40	50	60
GOVERNMENT	200	220	250	200	200	230	240
TOTAL	450	530	560	580	620	590	630

COMMUTERS

Commuting workers living in Camden County and working elsewhere are the county's greatest income producer. Even though commuting workers have declined as a percentage of the work force in the last few years, they still account for more than 70% of all workers and 65% of all county income derived from labor. Pasquotank County employs the greatest number of Camden County workers, with the Tidewater Virginia SMSA being a close second. Together these two destinations employ 92% of Camden County's commuting workers.

COMMUTING PATTERNS 1970 - 1980 CAMDEN COUNTY



ENTREPRENEURSHIP

The number of business establishments in Camden County grew steadily from 1979 to 1983. In 1979, there were 49 business establishments with payrolls in the county; by 1983 there were 63 businesses, almost a 30% increase. Small establishments, with less than five employees, are the most numerous, but recently there has been a marked increase in the number of establishments with greater than five but less than ten employees. The tables below illustrate the trends in new business starts and business growth during the 1979-1983 period.

CAMDEN COUNTY: NUMBER OF BUSINESS ESTABLISHMENTS, EMPLOYEES, AND PAYROLL 1979-1983

	1979	1980	1981	1982	1983
NUMBER OF ESTABLISHMENTS	49	53	50	60	63
NUMBER OF EMPLOYEES	217	203	228	256	272
1ST QUARTER PAYROLL (\$1,000)	315	320	408	457	539
ANNUAL PAYROLL(\$1,000)	1,369	1,501	1,747	2,211	2,337

CAMDEN COUNTY: NUMBER OF ESTABLISHMENTS BY NUMBER OF EMPLOYEES

		1-4:	5-9:	10-19:	20-49:	50-99:
1979	49	34	8	6	1	0
1980	53	41	8	3	1	0
1981	50	37	6	5	2	0
1982	60	41	14	4	1	0
1983	63	41	15	6	1	0

SOURCE: COUNTY BUSINESS PATTERNS: NORTH CAROLINA, 1979 - 1983. US BUREAU OF CENSUS

RETAIL SALES

Retail sales in Camden County did not keep pace with inflation in the five-year period from 1979 to 1984. Retail sales in 1979 was \$9,118,650; by 1984 sales had grown only to \$10,654,866, or slightly less than 17%. At the same time inflation was pushing the consumer price index up by slightly more than 37%. Two of the reasons for the poor performance of Camden County's retail sector is the overpowering effect of Elizabeth City's retail market and Camden County's small population base. The county does not have a major supermarket, an automotive showroom, or in a discount store. Most retail outlets are convenient-type community grocery/gasoline stations.

RETAIL SALES: CAMDEN COUNTY

1979-1980	1980-1981	1981-1982	1982-1983	1983-1984
\$9,118,650	10,520,506	10,731,790	10,280,143	10,654,866

EXISTING LAND USE

The land uses in Camden County are overwhelmingly rural in nature. Approximately 92% of the County's total acreage is in either forest land or agricultural uses; less than 2% of the county's lands can be classified as urban or built up. The county has no incorporated towns or cities; in fact, there are only two traffic lights in the entire county. Population density is very sparse, with only 24.6 persons per acre. Camden County ranks 94th in population density among North Carolina's 100 counties.

MAJOR LAND USE CLASSIFICATIONS: CAMDEN COUNTY

LAND USE CATEGORY	ACRES	PERCENT OF TOTAL
WATER	49,900	24.48%
LAND	153,914	75.52%
(% OF LAND) FOREST	92,016	59.78%
FARMS	50,425	32.76%
URBAN/BUILT UP	1,900	1.20%
TOTAL ACREAGE	203,814	100.00%

Source: Profile North Carolina Counties, Office of State Budget and Management

DEVELOPMENT PATTERNS AND DEVELOPMENT TRENDS

Historically, residential and commercial development in Camden County has been concentrated at or near the unincorporated crossroad communities of South Mills, Camden, Belcross, Shiloh, and Old Trap and along the U.S. Highway 17 Causeway leading out of Elizabeth City, NC, to the Camden community. During the 1960 to 1980 period a number of subdivision developments such as Whitehall Shores, Texeco Beach, Taylor Beach, and Camden Point Shores created small pockets of residential development outside of these crossroads communities and along the estuarine shore in the southern portion of the county.

It should be noted that while the areas identified are the county's primary built-up concentrations, these areas are by no means major developments.

Since the previous land use update was completed in 1980, there has been very little development activity. There have been no new subdivision plats approved nor have there been any new mobile home parks established since the 1980 Land Use Update was prepared. The only platting activity during the past five years has involved the modest expansion (less than 20 lots) of two existing subdivisions.

Residential construction since 1980 has averaged less than 40 dwelling units per year, with approximately 66% of these additional units being mobile homes. Only one building permit for a new commercial structure has been issued during the last three years.

LAND USE COMPATIBILITY PROBLEMS

Land use compatibility problems were defined in the *1980 Camden County Land Use Update* as "... human activities [which] negatively affect other human activities, the natural environment, and property values." The 1980 update goes on to add that compatibility problems are basically perceptual problems based on the values and judgement of the beholder.

The historically rural nature of Camden County, its rather low population density and low development pressures, and the predominance of agricultural land uses have created a very tolerant attitude among residents toward adjacent land uses that are often considered incompatible. Camden County residents are particularly tolerant of adjacent agriculture uses. Most residents of the county are either farmers or descendants of farmers.

The 1980 Camden County Land Use Update lists several compatibility problems concerning agriculture uses located near residential uses. The Planning Commission and most citizens who provided input concerning conflicts between agriculture and residential uses seem to view residential development as the intruder. In the view of local residents, occupants of new residential development were well aware of the predominantly agriculture environment of Camden County; in fact, it was these rural qualities that led them to locate in Camden County; by exercising this choice the new residents have "bought in" to the county's intensive farming activities and the accompanying nuisance odors of hog parlors, the seasonal burning of field stubble, and the wind borne dust from the large expanses of cultivated fields.

The most obtrusive land use compatibility problems, as perceived by county residents, are mobile home park development and subdivision development permitting mobile homes. The residents do not seem to mind mobile homes on single lots scattered in with conventionally built homes and located along the primary and secondary road system within the county. But they do object to new subdivisions with new street development that permit mobile homes and that are developed at the minimum acceptable design standards.

Mobile home parks are somewhat acceptable as long as they are not too large and they have a sufficient buffer of vacant or agricultural lands between the park and existing residential development.

MAJOR PROBLEMS RESULTING FROM UNPLANNED GROWTH

Very low development pressures in the past have allowed Camden County, for the most part, to escape any extensive problems associated with "unplanned growth". The county, however, has not escaped all such problems. The major problems under this heading involve the development and platting of subdivisions on unsuitable soils, residential construction in the flood plain, and the lack of publicly controlled points of access to the estuarine waters bordering the county.

Camden Point Shores Subdivision, located almost at the southern most tip of the county, is the most notable example of subdivision platting on unsuitable soils. This subdivision is located on a 5000-acre site near the southern tip of the county; approximately 500 lots have thus far been platted. The soils on this site have an extremely high water table, ranging from ground level to less than 3' below the surface. Extensive drainage has been undertaken to lower the water table, which in some cases has improved the usability of many lots. To date, development in the subdivision has been very limited; however, the contin-

ued development of the remaining platted lots could pose a threat to the water quality in the area if more extensive drainage is necessary to make the lots usable. Camden Point Shores began development in 1966, prior to the county's adoption of subdivision regulations and a zoning ordinance.

Probably the most extensive occurrence of unplanned growth is development in the flood plain. Approximately half of Camden County's total acreage lies in the 100-year flood plain area as designated by The Federal Emergency Management Agency. Most of the development that lies in the county's flood plain was constructed before anyone was even aware of the 100-year flood elevation.

New construction since 1973, the year Camden County entered into the Emergency Phase of the National Flood Insurance Program, for the most part has conformed with the flood plain regulations in force at the time of construction; however, since for much of this time the county did not have a licensed Building Inspector employed to oversee new construction, many violations of FEMA regulations did occur. The county is now participating in the regular phase of the Federal Flood Insurance Program, but it still does not have a full-time licensed Building Inspector to oversee new construction or substantial rehabilitations of dwellings.

Another major problem resulting from unplanned growth involves the county's lack of control of properties fronting Public Trust Waters that could provide public access to these waters. This lack of public access is an issue that the county has only recently begun to realize. Camden County does not own or control any sites that will provide its residents with convenient access to its estuarine waters.

AREAS LIKELY TO EXPERIENCE MAJOR LAND USE CHANGES

Future development is expected to continue to occur in and around existing crossroad communities, in subdivision developments along the Pasquotank River Shore in the southwest section of the county, and along the U.S. 17 causeway leading out of Elizabeth City. Historically, this has been the case, and most building permits issued during the past three years have been in these areas.

Development at the crossroad communities and in the water front subdivisions is expected to be primarily single-family residential. Existing development along the causeway is primarily commercial and until recently was limited because of severe soil limitations regarding septic tank usage. Such limitations restricted the size of developments and also restricted usage to commercial units with a limited water usage. Elizabeth City is now extending public sewer and water service across the Pasquotank River to serve establishments on the causeway. The availability of these services will permit development to occur at much greater densities than now exist. The construction of a three-story, multi-family residential structure is now underway on the causeway; this development could not have occurred without the provision of these services. This structure is the only multi-family structure in Camden County.

The area of the county along the Virginia State Line contains several large tracts of land under single ownership that extend across the state boundaries. These large tracts have undergone extensive clearing and drainage construction. This area is presently zoned for agricultural uses, and while there have yet to be any requests for subdivision approvals or zoning changes, rumors persist that a major large scale development is planned.

RESIDENTIAL LAND USE

As has been previously stated, residential concentrations occur primarily in crossroad communities and residential subdivisions developed near the county's waterfront areas. Most of the county's residents, however, are single-family homes scattered along the paved state secondary road system in the county. The most notable change in the county's residential pattern has been the construction of a 3-story, multi-family structure along the causeway near Elizabeth City.

HOUSING CONDITIONS

During the spring of 1985, a county-wide housing condition survey was carried out in Camden County by the Regional Development Institute at East Carolina University. The survey examined 2,022 residential units in the county and classified each unit as either standard or substandard. The results of the survey indicate that 637 dwelling units or approximately 32% of all residential units in the county are in substandard condition.

The Courthouse township had the greatest number and the highest percent- age of substandard dwellings. Shiloh township had the fewest and lowest percentage of substandard units. Mobile homes had a slightly higher proportion of substandard units than did conventionally built units. County wide, approximately 32% of the conventionally built homes were judged substandard while almost 37% of the mobile homes were determined to be substandard.

The survey also provided an updated count of the number of dwelling units in the county, the vacancy rate, and the distribution of mobile homes in the area. According to the results of this 1985 survey, there are 2,022 residential units in Camden county; approximately 15% or 304 of these units are mobile homes, and approximately 85 units are vacant, yielding a 1985 vacancy rate of only 4.2%. All vacancies recorded were among conventionally built units; mobile home units had a 0% vacancy rate.

HOUSING CONDITIONS: CAMDEN COUNTY-1985 CAMDEN COUNTY

	TOTAL	STANDARD	SUBSTANDARD	VACANT
CONVENTIONAL HOME	1718	106	527	85
MOBILE HOMES	304	194	110	0
TOTAL	2022	1300	637	85
PERCENT OF TOTAL	(100 %)	(64.3 %)	(31.5 %)	(4.2 %)

SOURCE: CAMDEN COUNTY HOUSING CONDITION SURVEY, REGIONAL DEVELOPMENT INSTITUTE, EAST CAROLINA UNIVERSITY (1985)

This 1985 survey, along with the 1980 Census and a survey of mobile homes carried out in 1981 during the previous Land Use Update, provides recent and useful comparative data for measuring changes in the distribution and composition of the housing inventory in Camden County.

The most notable changes in the housing inventory since the 1980 Census have been a decline of 125 units from the county housing inventory, an increase of six occupied units, a decline of 131 vacant units, and a redistribution of mobile homes in the county.

**HOUSING INVENTORY AND DISTRIBUTION:
CAMDEN COUNTY 1980 & 1985**

PLACE	1980 CENSUS	1985 SURVEY	% CHANGE
CAMDEN COUNTY			
TOTAL UNITS	2147	2022	-5.8%
OCCUPIED	1931	1937	+0.3%
VACANT	216	85	-60.6%
VACANCY RATE	10.0%	4.2%	-58.0%
MOBILE HOMES	303	304	+0.3%
COURTHOUSE TWP			
TOTAL UNITS	735	726	-1.2%
OCCUPIED	676	701	+3.7%
VACANT	59	25	-55.9%
VACANCY RATE	8.1%	3.4%	58.0%
MOBILE HOMES	91	86	-5.5%
SHILOH TWP			
TOTAL	667	658	-1.4%
OCCUPIED	580	620	+6.9%
VACANT	87	38	-56.0%
VACANCY RATE	13.0%	5.8%	-55.4%
MOBILE HOMES	82	112	+36.6%
SOUTH MILLS TWP			
TOTAL UNITS	745	638	-14.4%
OCCUPIED	675	616	-8.7%
VACANT	70	22	-68.6%
VACANCY RATE	9.4%	3.4%	-64.0%
MOBILE HOMES	130	106	-18.5%

The significant decrease in the total number of dwelling units in the county is probably due to differences in survey methodologies used to establish just what should be counted as a dwelling unit. While housing units are constantly being added and lost from the housing inventory, it is doubtful that such a decrease is likely to occur in a span of only five years, particularly since approximately 40 units per year are being added to the inventory.

The 1985 survey provided by RDI, we think, gives a more usable description of the county housing inventory since, obviously, abandoned residential structures were not counted in the overall inventory. The slight increase in the number of occupied units seems to be reasonable when compared with population projections made by the Department of Budget and Management. Population projections for Camden County indicate only a six person increase from 1980 to 1985, from 5,829 to 5,835. The 4.2% vacancy rate established by the 1985 RDI survey is much more realistic than the 10% vacancy rate estimated by the 1980 Census.

The redistribution of mobile homes is puzzling. In 1980, South Mills led the county in the number of mobile homes; by 1985 there was a significant shift to the Shiloh Township. County-wide, the number of mobile homes remained about constant.

COMMERCIAL LAND USE

Commercial land uses are most concentrated along U.S. 158 from Elizabeth City to Belcross, though they do not form a continuous strip. This stretch of highway includes the unincorporated community of Camden, which is the county seat of the county; Camden County High School; and the county's only bank, only shopping center, and only industrial establishment.

The only other commercial center is at South Mills on U.S. Highway 17 between Elizabeth City and the Virginia line. All other commercial land uses are convenient-type grocery/gasoline stations at various crossroad locations in the county.

INDUSTRIAL LAND USES

Only one industrial establishment, other than saw mills, is located in Camden County. This industry manufactures concrete products such as septic tanks, road culverts, and concrete pipes. The plant is located between Camden and Belcross along U. S. 158.

FOREST LANDS

North Carolina Forestry Service information provides comparative forestry data for the years 1974 and 1984. Since 1974 the amount of forestry lands has declined. Of course, during this period the country was going through a tremendous inflationary period that depressed new home construction and consequently the country's lumber consumption and demand for forestry products.

During this same period, farm prices improved dramatically, encouraging land owners to put more and more lands into cultivation and to delay or discontinue any reforestation activities. Total forest lands during this period declined 97,680 acres to 92,016, with almost all of the lost forest lands being cleared for agricultural production.

Land clearing activities are still underway. The volumes of annual timber removal in 1984 were running well ahead of those in 1974, with 33,187 MBF (thousand board feet) of saw timber being removed in 1984 compared to 18,114 MBF in 1974. In 1974, annual removals were less than 72% of annual growth; in 1984 removals were 140% of annual growth. Estimates based on stumpage measurements indicate that there were 637,856 MBF of saw timber and 187,323 CBF (cubic board feet) of growing stock standing in the county in 1974. In 1984 these measurements indicated that there were 573,711 MBF of saw timber and 164,177 CBF of growing stock, a decline of 10% and 12% respectively.

AGRICULTURAL LANDS

The last three Census of Agriculture reports (1974, 1978, and 1982) prepared by the Bureau of Census demonstrate the boost to farming caused by dramatic improvements in farm product prices from 1974 to 1978 and the effects of the subsequent deterioration of farm prices between 1978 and 1982.

In 1974, there were 150 farms in Camden County, comprising 51,925 acres; by 1978, there were 166 farms, comprising 55,490 acres. In 1982, the number of farms had declined to just 131, less than there were in 1974, with only 50,425 acres being farmed.

Agricultural activities in Camden County are following the typical pattern of all extractive use type industries. Fewer persons are involved in the industry, but those who are, are producing a much greater volume. There are fewer farmers, but larger farms.

COMMERCIAL AND RECREATIONAL FISHING

Commercial fishing has not traditionally been a major economic activity in Camden County. From 1978 through 1984, the Department of Marine Fisheries recorded fishing activities in Camden County for only two years, 1982 and 1983. In 1982, the available information only records that there were 79 commercial vessels licensed in Camden County. There is no information concerning the size of catch by county fishermen or its value. In 1983, there were 80 vessels licensed and 69,637 pounds of fish caught, with a dock side value of \$45,196.

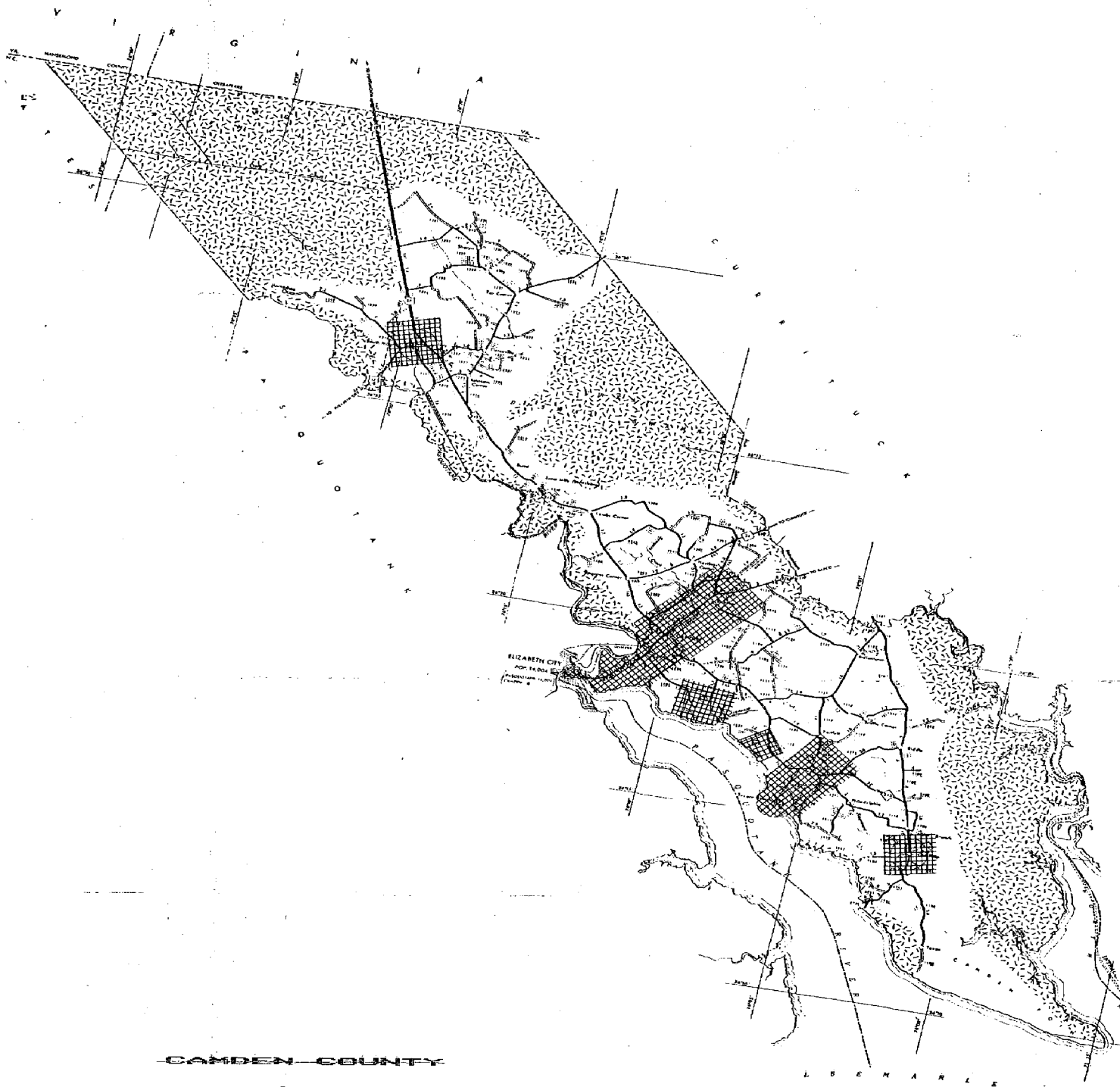
HISTORICAL AND CULTURAL RESOURCES

The 1980 Camden County Land Use Plan provides a map showing 10 archaeological sites in the Joyce Creek watershed. Another possible site, the Pine Bluff site, located on N.C. 343 and S.R. 1100 in Shiloh Township, has been identified.

There are six sites in Camden County listed on the National Register of Historic Places:

Caleb Grundy House
Camden County Courthouse Milford
William Riley Abbot house
Lamb-Ferebee House
Camden County Jail

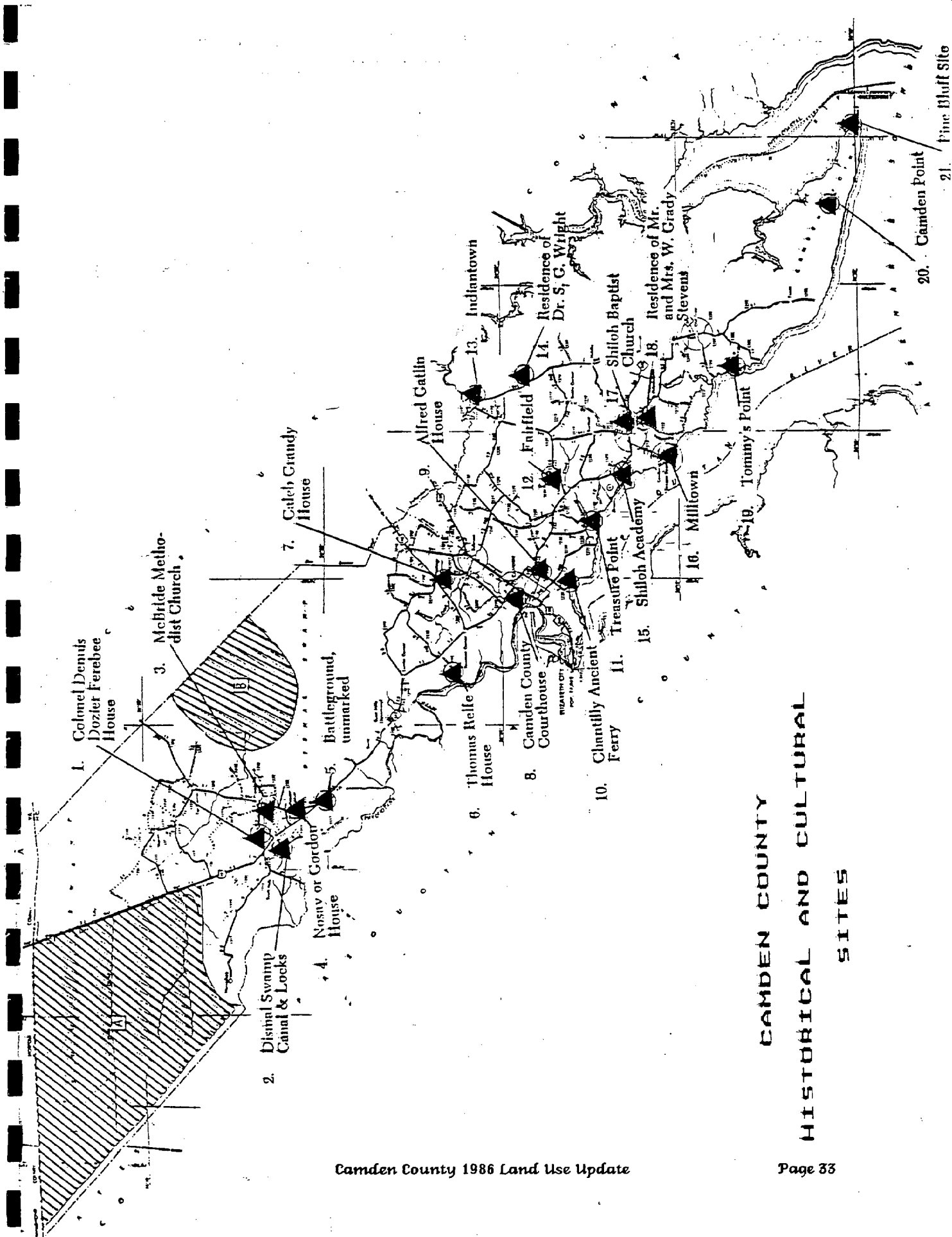
The following map, from Camden County, North Carolina: An Appraisal of Potential for Outdoor Recreation (Soil Conservation Service, Camden, 1973), shows the location of these registered sites and the location of 15 additional historical and cultural sites that are worthy of recognition.



CAMDEN COUNTY
1985
EXISTING LAND USE

-  **FORESTS**
-  **FARMS**
-  **DEVELOPED**

The preparation of this document was financed in part through a grant provided by the North Carolina Coastal Management Program through funds provided by the Coastal Zone Management Act of 1972 as amended, which is administered by the Office of Ocean and Coastal Resources Management, National Oceanic and Atmospheric Administration.



CAMDEN COUNTY HISTORICAL AND CULTURAL SITES

AREAS OF ENVIRONMENTAL CONCERN

The Coastal Resources Commission has designated four categories of environmental concern in the twenty coastal counties included in the North Carolina Area Management Act:

- 1) The Ocean Hazard System
- 2) The Estuarine System
- 3) Public Water Supplies
- 4) Natural and Cultural Resources Areas

Only one of these four categories, the Estuarine System, pertains to Camden County.

The Estuarine System category contains four components designated as areas of environmental concern: Estuarine Shorelines, Public Trust Waters, Coastal Wetlands, and Estuarine Waters.

All of these components are present in Camden County.

PUBLIC TRUST WATERS

Public Trust Waters are all waters and submerged lands in the twenty county coastal region where the public has rights of use, including rights of navigation and recreation. The Coastal Area Management Act more specifically identifies Public Trust Waters as:

- 1) "All waters of the Atlantic Ocean and the lands thereunder from the mean high water mark to the seaward limit of state jurisdiction"
- 2) "All natural bodies of water subject to measurable lunar tides, and all lands thereunder to the mean high water mark"
- 3) "All navigable natural bodies of water, and all lands thereunder, except privately owned lakes to which the public has no right of access"
- 4) "All water in artificially-created bodies of water containing significant public fishing resources or other public resources which are accessible to the public by navigation from bodies of water in which the public has navigation rights"
- 5) "All waters in artificially-created bodies of water in which the public has acquired rights by prescription, custom, usage, dedication, or any other means."

ESTUARINE SHORELINES

Estuarine shorelines are non-ocean shorelines that are "intimately connected to the Estuary." The estuarine shoreline is more specifically defined as a 75' strip of land bordering all waters determined to be estuarine through an agreement between the North Carolina Department of Natural Resources and Community Development and the North Carolina Wildlife Resources Commission. In Camden County, the estuarine shorelines extend continuously from the Norfolk Southern Railroad bridge

near Elizabeth City, south around Camden Point and north along the North River for its entire length.

COASTAL WETLANDS

Coastal wetlands are defined as any marsh subject to regular or occasional flooding by tides, including wind tides. Coastal wetlands are generally not mapped but are identified by the presence of one or more of ten plant species. Coastal wetlands in Camden County normally occur near the mouths of tributaries emptying into the estuarine waters of the Pasquotank River, the Sound, and the North River.

ESTUARINE WATERS

Estuarine waters are defined as "all waters of the Atlantic Ocean within the boundary of North Carolina and all waters of the bays, sounds, rivers, and tributaries thereto seaward of the dividing line between coastal fishing waters and inland fishing waters, as set forth in an agreement adopted by the Wildlife Resource Commission and the Department of Natural Resource and Community Development."

In Camden County, the Pasquotank River is declared Estuarine from the Norfolk Southern Railroad Bridge near Elizabeth City to the Sound. The North River is Estuarine for its entire length in North Carolina.

POLICY: AREAS OF ENVIRONMENTAL CONCERN:

ISSUE: <i>Protection of the Estuarine System AEC's</i>

FINDINGS:

Coastal Wetlands: No Specific threats to coastal wetland areas in the county have been identified. If one exists, it is due to land uses adjacent to the wetlands. rather than to any development within these lands. Potential threats to these lands are primarily due to surface run-off associated with agriculture, forestry, and residential uses.

PREVIOUS POLICY:

No previous policy was adopted, but the following was suggested: "To encourage and otherwise permit only those uses which are demonstrably consistent with protection of salt marshes,..."Camden County Land Use Plan 1980-1990.

CURRENT POLICY:

The County recognizes the fragile nature of the coastal wetlands and its value in retarding run-off, reducing erosion, and supporting aquatic life. It shall be the policy of Camden County to support the efforts of the Coastal Resources Commission in protecting this valuable resource and to rely on the Division of Coastal Management to control development in these areas through its present permitting system.

FINDING:

Estuarine Waters: Surface run-off, septic tank leakage, and liquid waste discharges pose the greatest threats to the estuarine waters.

Agricultural run-off poses the greatest potential threat to these waters in Camden County, simply because of the scope of this activity. Septic tank leakage and its subsequent run-off in the waters pose some threat, particularly in the Camden Point area where the water table is quite high and could float the effluent to the surface. All of the subdivisions now dotting the Camden shorelines are lots greater than the minimum size required by the County Health Department.

The Causeway development adjacent to Elizabeth City is the most intensively used land in the county. Most urban run-off and development impacts to the estuarine waters will most likely occur in this area.

PREVIOUS POLICY:

No previous policy was formally adopted, but the following was suggested: "...to permit only those uses in Estuarine Waters which are demonstrably consistent with safeguarding and perpetuating the biological, social, economic, and aesthetic value of estuarine waters. "Camden Land Use Plan, 1980-1990.

CURRENT POLICY:

It shall be the policy of Camden County to rely on the C.A.M.A. permitting process and the regulations of other State and Federal agencies with development jurisdiction, as well as on existing local development regulations, to mitigate threats to the County's estuarine waters.

FINDINGS:

Estuarine Shorelines: The greatest threat to the estuarine shorelines in Camden County are bulkheading activities in its several waterfront subdivisions. These activities are rigorously regulated by the Division of Coastal Management. It is assumed that the bulkheading permitted by C.A.M.A. rules does not threaten the integrity of the estuarine shoreline.

PREVIOUS POLICY:

No previous policy was formally adopted, but the following was suggested during the previous land use update: "...to protect the dynamic nature of estuarine shorelines and values of the estuarine system." Camden Land Use Plan, 1980-1990.

CURRENT POLICY:

Camden County recognizes the extreme vulnerability of the estuarine shoreline and supports the C.A.M.A. permitting process to regulate development in this area.

CAMDEN COUNTY: ESTIMATED DEMAND

Housing

Population projections for Camden County indicate an increase of 692 persons from 1980 to 1995. In both 1970 and 1980, the average persons per dwelling unit in Camden County was approximately 3.3. (The 1970 rate was 3.3; the 1980 rate was 3.27.) Assuming that this same household size remains constant, there will be a need for 210 new dwelling units by 1995.

Based on a minimum lot size of 20,000 square feet, approximately 96 acres of land will be needed for these new housing units.

Schools

Enrollment in the Camden County Schools is now under the system's capacity, and enrollment is expected to decline during the planning period. No new classroom construction will be needed because of enrollment growth during the planning period.

Solid Waste

The County now serves 1,783 occupied housing units with four compactor vehicles, providing door-to-door pick-up. Each compactor serves on the average of 90 housing units per day. An increase of 210 housing units would require each truck to serve an average of 100 dwelling units per day. An additional compactor would yield an average daily customer-per-truck rate of 80 dwelling units, a much more reasonable number to serve in door-to-door fashion. If household growth increases as anticipated, the County will probably add additional compactors to the program or else reduce service.

CURRENT PLANS, POLICIES, AND REGULATIONS

Camden County relies on five basic regulatory tools to control development in the county. These tools include land use restrictions on mapped land areas, as well as specific performance standards that development must meet.

REGULATIONS

Camden County, North Carolina, Zoning Ordinance, 1972.

In November 1972, Camden County adopted its zoning ordinance along with its subdivision regulations. The ordinance established land use zones that were in general conformance with the Sketch Development Plan. The ordinance establishes ten separate zoning districts, as well as special provisions for mobile home parks and extractive uses.

Camden County Subdivision Regulations, 1972

In November 1972, Camden County adopted subdivision regulations. This ordinance emphasizes orderliness of development. The ordinance, in addition to assigning decision-making responsibilities, establishes applications and permit procedures and amendment and appeal mechanisms; it defines the term "subdivision" and establishes minimum development standards, including lot size, set backs, lot width, yard dimensions, access, roadway standards, drainage requirements, and public facility services.

Regular Phase of the National Flood Insurance Program

Camden County is participating in the regular phase of the National Flood Insurance Program and enforces the required precautionary regulations required by this program. The County uses the Flood Insurance Rate Maps provided by the Federal Emergency Management Agency and imposes specific construction standards in these flood hazard areas. The ground floor of all dwellings must be higher than the 100-year flood elevation.

North Carolina Building Code

In July 1982, the County began enforcing all elements of the North Carolina Building Code. This Code, of course, regulates all new construction and the installation of electrical, plumbing, and mechanical services, as well as mobile home installations. Camden County is in the 110 mph wind velocity zone. Construction and mobile home installation standards for this zone are enforced.

County Health Department Septic Tank Permits

The County Health Department regulates development density in Camden County. The regulations of this agency establish minimum lot sizes and minimum soil conditions for the installation of on-site sewage disposal systems of less than 3,000 gallons. The minimum lot size for septic tank approval in the county is 15,000 square feet for lots served by public water and 20,000 square feet for those using on-site water supplies. These standards are county-wide minimums and are contingent on certain soil conditions and drainage characteristics of the building site.

PLANS

Sketch Development Plan: Camden County, NC, by Camden County Planning Board, 1972.

This plan was offered as a "general guide to assist officials" in developing land use regulations. The plan outlines a spatial arrangement to accommodate expected growth and is based on implied rather than formally articulated goals. The main goal seems to be to maintain the rural and predominantly agricultural nature of the county. The plan attempts to preserve this rural, agricultural environment by concentrating development near existing towns and villages and along arterial roads connecting these communities.

An Appraisal of Potential for Outdoor Recreation, by the Soil Conservation Service, U.S. Department of Agriculture, 1973.

This document evaluates Camden County's potential for development of eleven kinds of outdoor recreation and activities and ranks their potential for development as high or medium. Those types of recreation appraised as having high development potential were 1) picnic and field sports areas; 2) fishing waters; 3) hunting areas; 4) historical areas; and 5) shooting preserves. Those having medium potential were 1) vacation cabins, cottages, and home sites; 2) camping grounds; 3) golf courses; 4) riding stables; 5) vacation farms, and 6) water sports.

The Great Dismal Swamp State Park Master Plan, by the Division of State Parks, 1974.

This master plan outlines three phases for the development of the Great Dismal Swamp State Park. The first two phases of development would not generate sufficient public use to encourage peripheral development. These two phases consist of an access road, trail development, and camping facilities for special interest groups./ The third phase would include short interpretive nature programs for short-term itinerant visitors. This third phase is expected to generate 50,000 to 100,000 visitors per year. The development of this park has not been implemented and is not expected to occur during the ten-year planning period covered by this plan.

CAMA Land Use Plan, by the North Carolina Department of Natural Resources and Community Development, 1975.

The 1975 CAMA Land Use Plan provides a wealth of data concerning the Camden County environment and the extent of development in the county as it existed in 1975. This was the initial plan for the county prepared under the Coastal Area Management Act. and it thus places great emphasis on identifying potential areas of environmental concern and fragile areas.

Recreation and Open Space Plan for the County of Camden , North Carolina, prepared by Howard T. Capps, 1977.

This plan inventoried all existing recreational sites and facilities in the county in 1977 and compared the existing facilities with standards established by the National Parks and Recreation Association (NPRA). The county did not have any land areas specifically designated for recreational purposes, but relied on local school facilities. The plan established the county's recreational space need based on NPRA standards and population projections, identified seven potential park sites, and provided site plans and development cost

estimates for each site. The facilities provided at the sites were based on citizen questionnaires administered during the CAMA Land Use Plan preparations and a special recreational questionnaire administered by the consultant.

CAMA Land Use Plan Update, prepared by Planning and Design Associates, Raleigh, NC, 1980.

This plan provided the first five-year update to the original 1975 CAMA Land Use Plan. This plan provided an updated information base, including 1980 Census data, and for the first time identified development issues; established county goals, objectives, and policies concerning these issues and developed implementation strategies.

Transportation Improvement Plan, 1985-1996, North Carolina Department of Transportation, 1985.

This plan identifies all improvements scheduled to be completed in Camden County by the North Carolina Department of Transportation during the next ten-year period.

STUDIES

Housing Conditions Survey, study by the Regional Development Institute, 1985.

This study provides a comprehensive survey of residential units in Camden County. Housing units were sorted by type, including mobile homes; by condition; and by township. Housing deficiencies were listed by frequency of occurrence in each township. The study also identified concentrations of low and moderate income persons in the county.

Feasibility Study on Water Facilities for the County of Camden., North Carolina, study prepared by Moore, Gardner, and Associates, Inc., 1973.

This study provides perhaps the only detailed account of ground water supplies as they relate specifically to Camden County. The study outlines the design capacity of the South Mills Water System, computes the amount of water being treated and sold in 1973, and provides projections of future use and cost estimates for various expansion scenarios.

CONSTRAINTS TO DEVELOPMENT LAND SUITABILITY

SOILS

The best general description of the soils in Camden County is low, flat, and wet. The highest elevation in the county, located near Sharon in the north central portion of the county, is only 17 feet above sea level. Slopes in the county are generally less than 5% and seldom exceed 10% except for the banks of constructed drainage ditches. Depths to seasonally high water-table levels range from 0" to 30" below the ground surface; normal levels range from 5 to 13 feet throughout most of the county.

SOIL ASSOCIATIONS

The soils in Camden County have been grouped into five soil associations. Two of these associations account for approximately 94% of the county's total acreage. The largest of these two major associations, the PONZER - PAMLICO association, consists of deep organic Histosols occurring in flat pocosin-like areas or in the flood plain of major rivers and streams in or bordering the county. The Great Dismal Swamp, located in the northern portion of the county, is the prime example of a flat pocosin. The wooded swamp areas lying in the flood plains of the Pasquotank and North Rivers and the major tributaries of these rivers also consist of this soil association. This association comprises approximately 54% of all the land area in Camden county.

The second largest of the two major soil associations, the PASQUOTANK - MYATT - BARCLAY association, occurs as a large continuous body of soils forming the central spine of the county. It begins in the north, just north of Sharon, and continues in a single band to Texas, in the south. These soils are poorly drained to somewhat poorly drained and have loam and clay loam subsoils generally overlain with fine or very fine sandy loam or silt loam surface layers. This soil association accounts for approximately 40% of the county's land mass.

The remaining three soil associations account for only 6% of the county's total acreage. The largest of these is the DRAGSTON - BERTIE - KALMIA association, which occurs as three separate areas in the county: in the north near Pierceville; in the central part of the county near Camden and Belcross; and in the southeastern section of the county from Indiantown to Old Trap.

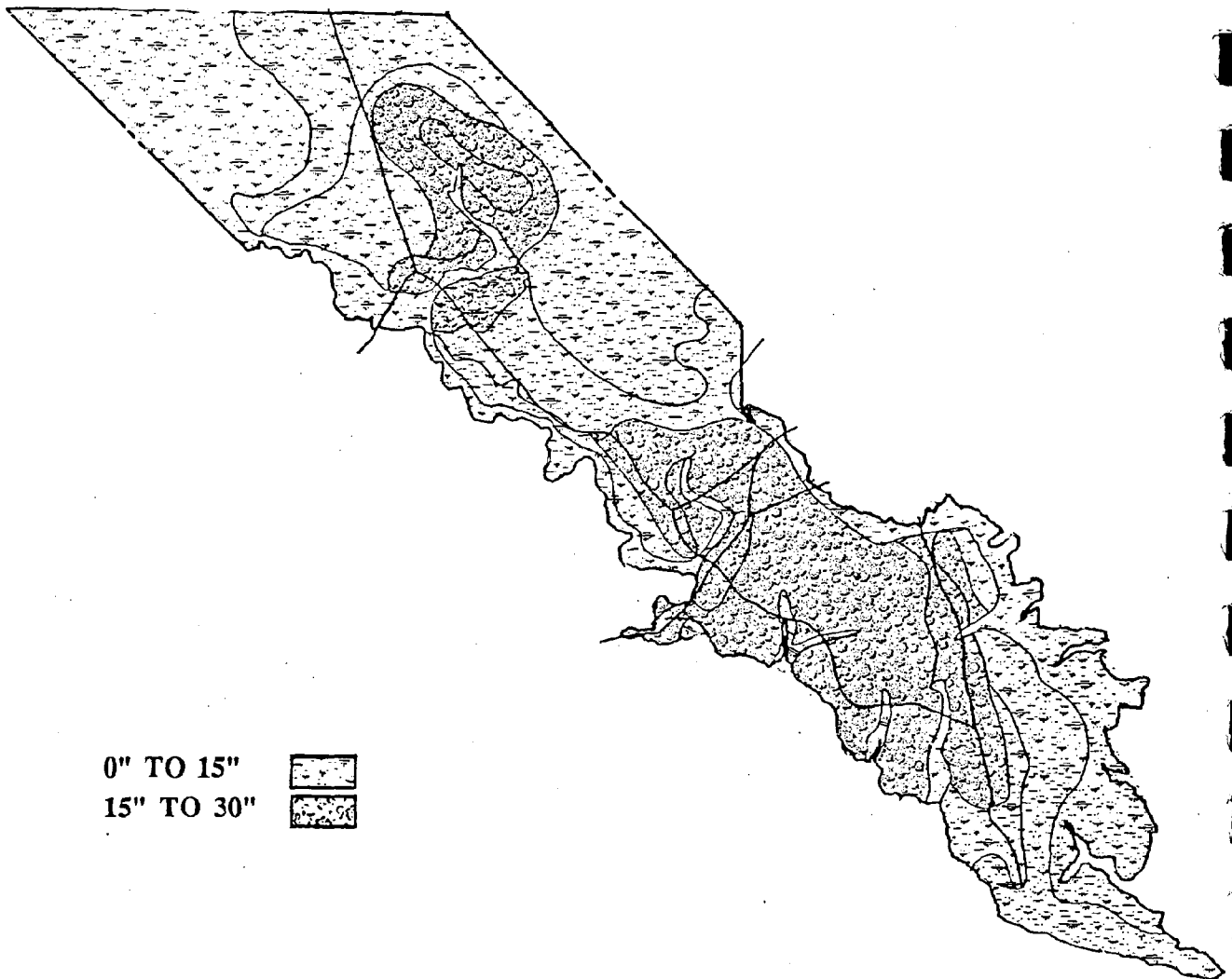
The second of these smaller associations is the NAHUNTA - EXUM association. This association generally occurs on gently sloping terraces bordering the swamp-like soils of the flood plains of the major rivers. Most of this association consists of a narrow band lying along state road NC 343 and running from Morgans Corner, in the north, to Camden in the south.

The last of these three minor associations, the BAYBORO - BLADEN association, occurs as relatively small fringe areas in three separate parts of the county: North of South Mills, northeast of Belcross, and east of Old Trap.

SOIL LIMITATIONS

The major limiting factor of all the soils in Camden County is their shallow, depth-to-water table characteristic. County wide the seasonally high water table is less than 30" beneath the ground surface; and in the major portion of the county, it reaches to or within 15" of the surface. This characteristic limits the soils absorptive capacity for use as septic-tank drainage fields, it limits the strength of the soil for supporting foundations of buildings, and it limits the agricultural productivity of the land by maintaining moisture saturation in the root zone layers of the soil.

CAMDEN COUNTY SOILS DEPTH TO WATERTABLE



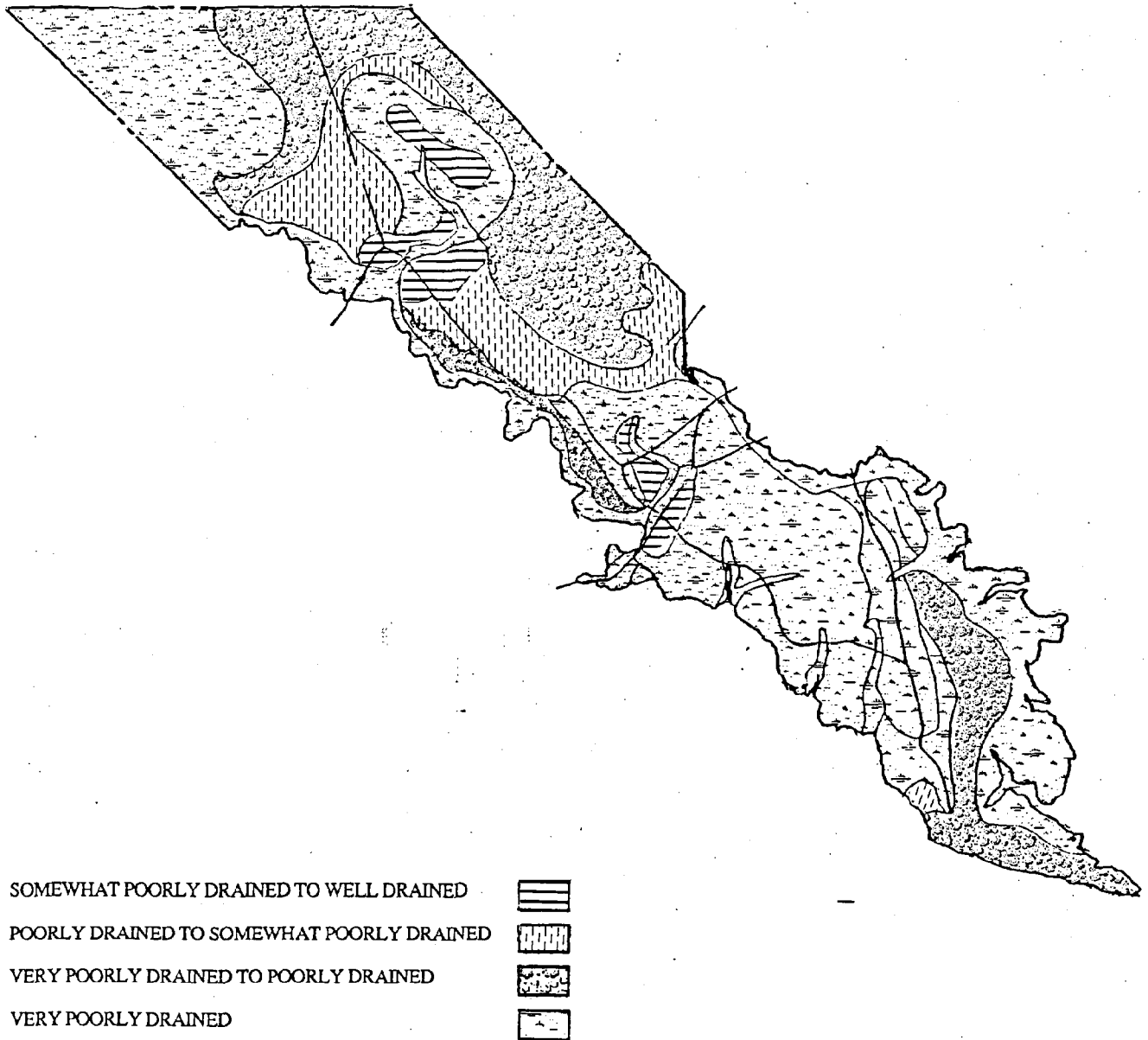
0" TO 15"
15" TO 30"



DRAINAGE CLASSIFICATIONS

Soils have been classified as to how fast moisture is removed from the surface, either as surface water run-off or through the internal movement of moisture down through the soil layers. There are seven drainage classifications assigned to soils; ranging from Very Poorly Drained to Excessively Drained. The soils associations in Camden county generally fall into only two classifications-- Very Poorly Drained and Poorly Drained-- although individual soil types within each of the soil associations may have different classifications.

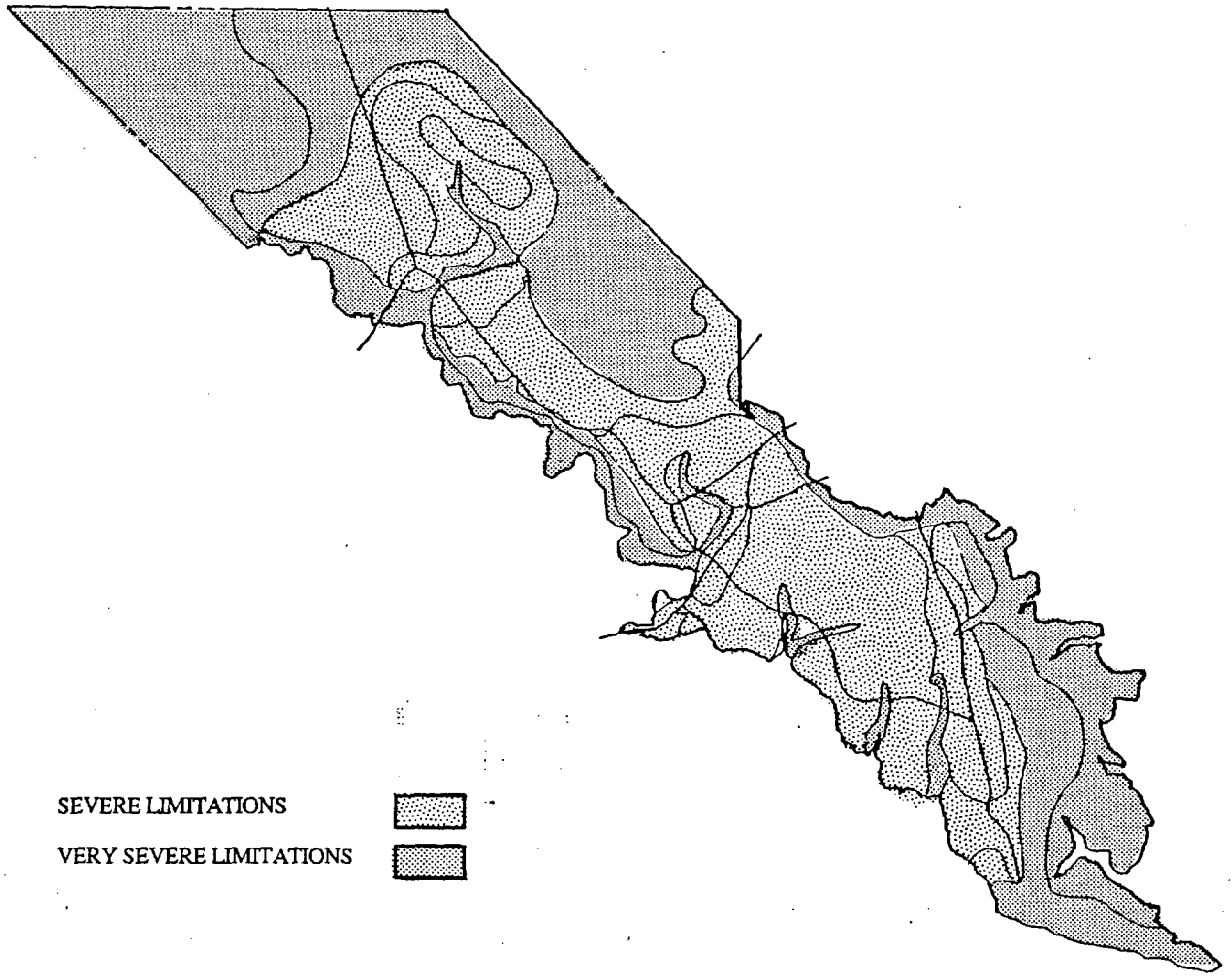
CAMDEN COUNTY SOILS DRAINAGE CLASSIFICATIONS



SEPTIC TANK LIMITATIONS

As one might expect, with the high water table and the poor drainage of almost all the soils, the limitations on septic tanks in Camden County are quite severe. The soil conditions in the county often require extra expense and efforts to support development. The Department of Health requires minimum lot sizes of either 20,000 sq.ft. or 40,000 sq.ft. for single-family homes in the county. In many cases, these large lot sizes are alone not sufficient to gain Health Department approval, and extensive excavation or drainage systems are required.

CAMDEN COUNTY SOILS SEPTIC TANK LIMITATIONS



SUMMARY OF CHARACTERISTICS

The preceding maps have indicated the general location of each soil association and generally reflect the characteristics of the major soil type within each association. There are individual soils found in these associations that do have characteristics substantially different from those of the association as a whole. In the table below, septic tank limitations, depth to water table, and drainage classification have been listed for each major soil type in each association.

This table and the preceding maps show the location of soil characteristics as they generally appear on the landscape and are not suitable for planning individual tracts of land. The local Soil Conservation Officer and the local County Health Officer must be consulted for any site-specific land evaluations. A soil survey for Camden County is now being prepared, and most of the field work has been completed. This document will contain site-specific soil information for all lands in the county.

SOIL LIMITATIONS:CAMDEN COUNTY

% of County	Soil Association	% in Assoc	Septic Tank Limitation	Internal Drainage	Depth to Watertable
40%	Pasquotank- Myatt- Barclay	35%	Severe	Vr.poor	0-15'
		30%	Severe	Poor	0-15'
		20%	Severe	S/W Poor	15-30'
3%	Dragston- Bertie- Kalmia	55%	Severe	S/W Poor	15-30'
		20%	Severe	S/W Poor	15-30'
		10%	Slight	Well	15-30'
1%	Nahunta- Exum	55%	Severe	S/W Poor	15-30'
		20%	Mod.	Mod.Well	15-30'
2%	Bayboro- Bladen	60%	Severe	Vr.Poor	0-15'
		25%	Severe	Poor	0-15'
54%	Ponzer- Pamlico	65%	Vr.Severe	Vr.Poor	0-15'
		10%	Vr.Severe	Vr.Poor	0-15'

SOIL EROSION

Due to the flat topography of the county, sheet and rill erosion are insignificant problems. However, erosion along the shorelines of the two major rivers draining the county has been significant.

In 1975, the U.S. Soil Conservation Service published a report, Shoreline Erosion Inventory, that described the extent of erosion along the shores of the Pasquotank and North Rivers in Camden County. The area studied 38.8 miles of Camden County shoreline extending from the U.S. 158 bridge at Elizabeth City, on the Pasquotank River, to the confluence of the Intercoastal Waterway at Taylor Bay, on the North River.

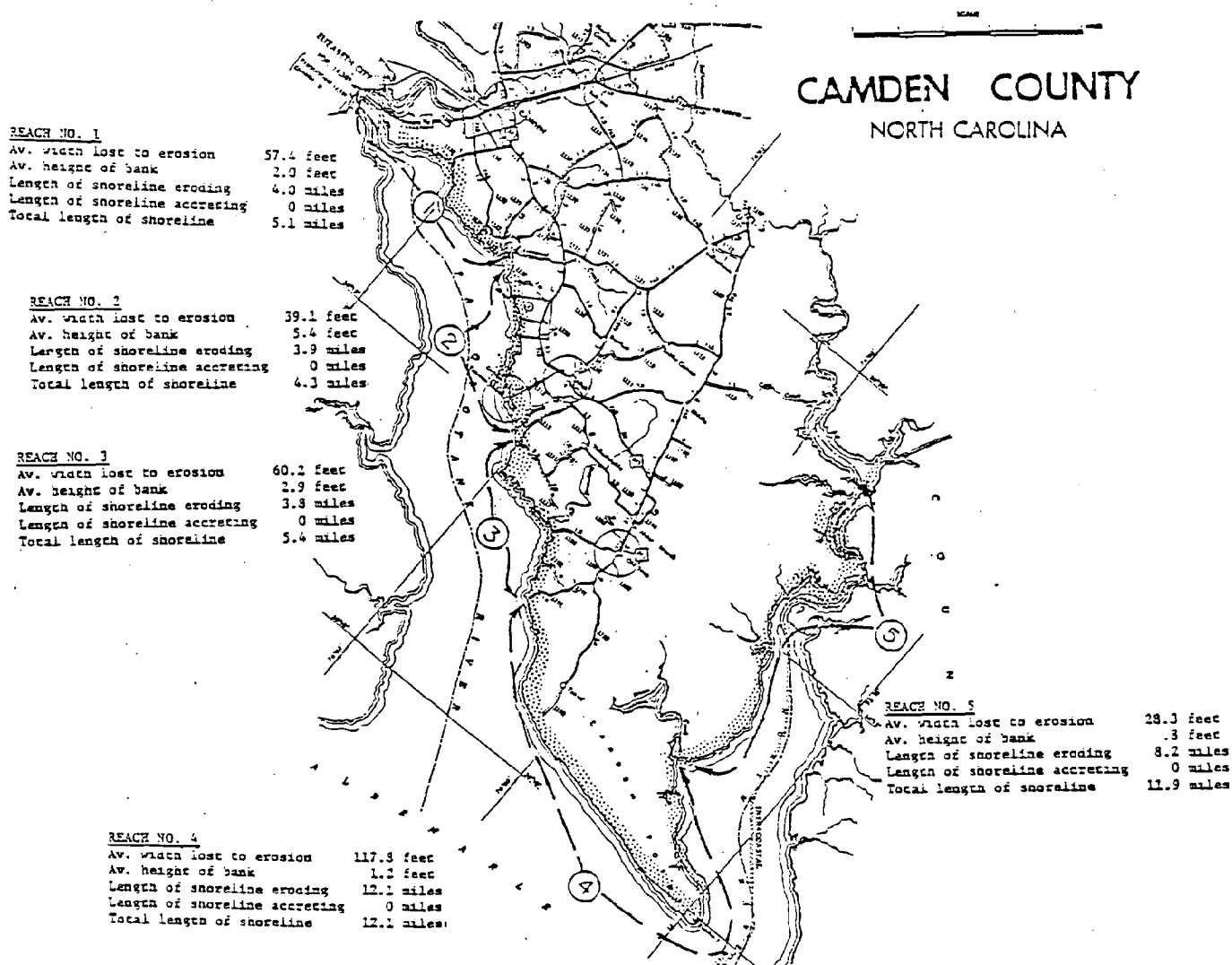
The shoreline erosion is measured in five reaches. The erosion rate varied considerably among these reaches, with the lowest rate being less than one foot per year and the greatest

being 3.8 feet per year. The average erosion rate for the entire 38.8 miles of shoreline studied was 2.1 feet per year.

CAMDEN COUNTY: SHORELINE EROSION

	LENGTH OF SHORELINE REACH	LENGTH OF SHORELINE ERODING	AVG. WIDTH LOST TO EROSION	AVERAGE EROSION RATE
1	5.1 MILES	4.0 MILES	57.4 FEET	1.85FT/YEAR
2	4.3	3.9	39.1	1.26
3	5.4	3.8	60.2	1.94
4	12.1	12.1	117.8	3.8
5	1.9	8.2	28.3	0.91
CAMDEN COUNTY				
AVERAGE	38.8 MILES	32.0 MILES	65.6 FEET	2.1FT/YEAR

SHORELINE EROSION



WATER RESOURCES

Water is the most noticeable and the most abundant natural resource in Northeastern North Carolina. While massively abundant and economically important, these resources for the most part are salty and hence unusable for consumption. Except for only a few instances, the water used by area residents comes from ground supplies.

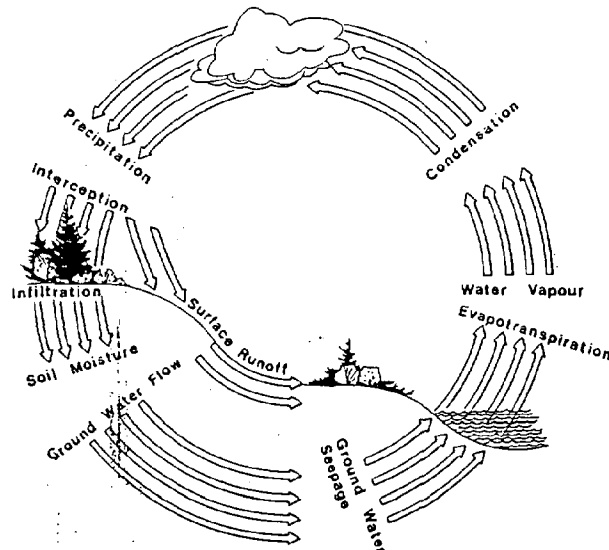
Generally speaking, the ground water supplies are as extensive as of the surface waters. Three stratified aquifers underlie much of the region and contain massive quantities of water. These ground water resources, while ample, suffer in usability because of their direct interface with the saltwater in the area and its frequent intrusion into these ground water supplies. The intrusion of saltwater into these underground aquifers is a major concern in Camden County.

The following discussion draws heavily from *WATER RESOURCES OF NORTHEAST NORTH CAROLINA*, by H.B. Wilder et al, 1978

WATER SUPPLY

The availability of water in any place at any particular time is dependent upon the interaction of various components of what is generally known as the Hydrologic Cycle. The components of the cycle include:

- (1) climatic factors, such as rainfall and temperature in the area;
- (2) vegetation or ground-cover, as these affect the rate of moisture evaporation; and
- (3) surface waters and groundwater, since they represent both moisture that is entering an area in the form of stream flow and moisture stored in surface reservoirs and underground aquifers.



The interaction of these components keeps in constant motion the circulation of the Hydrologic Cycle. Heat from the sun causes the evaporation of surface moisture and the transpiration of moisture from living plants. This evaporated moisture is carried by the winds until it cools and condenses and returns to the earth as precipitation. Once on the earth, gravity takes over and moves the water either above or beneath the ground toward the ocean.

WATER BUDGET

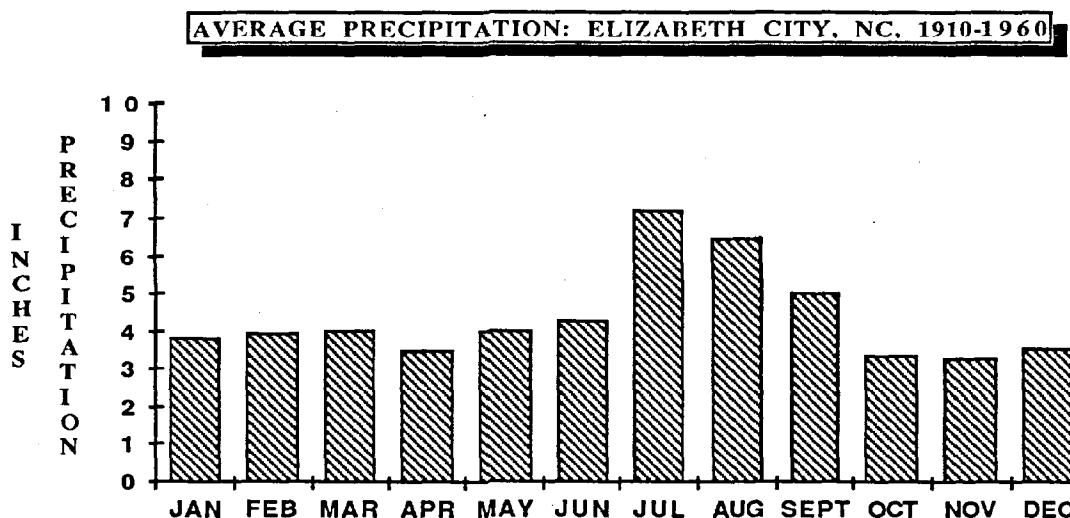
This cyclical movement can be expressed as a profit-and-loss statement where profit or loss is the difference in the moisture entering the area as steam, ground-water flow, and precipitation (income) and the water leaving the area, through evaporation, transpiration, and as surface or ground-water runoff (outflow). Profits would be recorded as increases in water stored in surface reservoirs or as increases in ground-water storage. This P/L statement is generally

referred to as a water budget : water entering the county either through stream flow or as rainfall minus water lost through transpiration, evaporation, and stream run-off yields water stored either as ground water or as surface water supplies(reservoirs).

PRECIPITATION

The base of the county's water budget is the amount of rainfall in the area. The annual rainfall in most of the county averages from 48" to 50". On the southern tip of the county, annual rainfall averages 46" to 48"

Monthly precipitation data collected at Elizabeth City, NC, from 1910 to 1960 indicate that the precipitation in the area is least during the months of April, October, and November, and greatest during the summer months of July, August, and September.

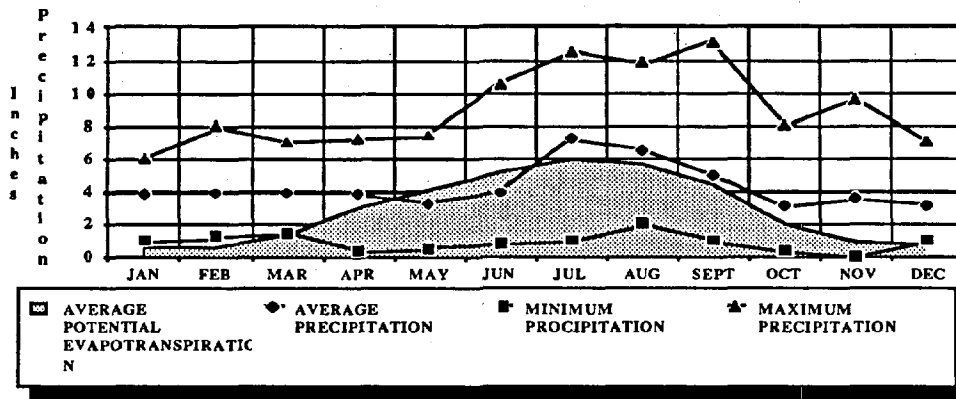


Source: Water Systems of Northeast North Carolina, H.B. Wilder, et al

EVAPOTRANSPIRATION

Evapotranspiration is a term developed to express the total amount of moisture discharged into the atmosphere through the evaporation of surface water and the transpiration from living plants. In such areas as Camden County, where large land areas are devoted to the cultivation of crops and forests, the transpiration rate can be quite high, particularly during the growing season. The graph below shows the comparative monthly precipitation and evapotranspiration rates as measured at Elizabeth City, NC. The shaded area in the graph represents periods of moisture deficit. As can be seen by the graph, a shortage or deficit of moisture in the county is most likely to occur during the growing season months of May, June, and the early part of July. Annually, evapotranspiration consumes approximately 34" of the annual 50" or roughly two-thirds of the county's annual precipitation.

MAXIMUM, AVERAGE, AND MONTHLY PRECIPITATION AND CALCULATED AVERAGE EVAPOTRANSPIRATION AT ELIZABETH CITY, NC, 1931-1960



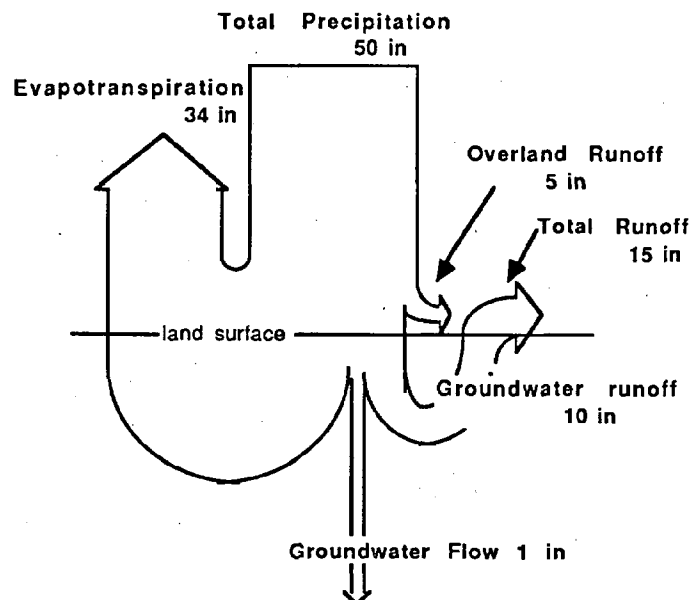
OUTFLOW

Because of the extremely high watertable, characteristic of Camden County and almost all of the counties in the Albemarle; very little of the precipitation falling in the area can be retained as additional soil moisture or ground water. Except for the winter months, the soils are perpetually at or near the saturation point.

What generally happens is that the shallow waterways and streams widen quickly to contain the run-off; after they recede, the excess groundwater then seeps into these streams becoming surface run-off.

AQUIFERS

Camden County is underlain by three major aquifers, each of which is fully discussed in Feasibility Study on Water Facilities for the County of Camden, Moore, Gardner, and associates, 1973, the source of most information that follows here. The upper aquifer or water table aquifer occurs in the surfacial geological layer and is unconfined and most easily accessible. Most of the wells in Camden County tap into this aquifer. The middle and lower aquifers occur in the Upper and Lower Yorktown geological formations. These aquifers are confined and under some artesian pressure.



WATER TABLE AQUIFER

The water table aquifer is generally five to thirteen feet beneath the surface and ranges from 45 to 130 feet thick. Seasonally, the water table may range from right at the ground surface to 15" to 30" below. Wells in this aquifer range in depth from 5 to 25 feet and produce yields of from 2 to 10 gallons per minute(gpm). Water withdrawn from the water table aquifer is generally low in dissolved solids and ranges in hardness from soft to moderately hard. Total mineral content ranges from 56 to 586 parts per million(ppm). Some isolated areas with very hard water have been tapped in the northern portion of the county.

MIDDLE (UPPER YORKTOWN) AQUIFER

The middle aquifer is partially confined and under some artesian pressure. The surface level to which water will rise in wells drilled into this aquifer range from 30' above mean sea level(msl) in the northern portion of the county to mean sea level in the southern part of the county. Wells withdrawing water from this aquifer range in depth of from 50' to 114' and produce yields ranging from 1 to 100 gpm.

Water in the middle aquifer is for the most part hard and alkaline, and it tends to form scale. This aquifer contains fresh water in all parts of the county, but is underlain by the more salty Lower Yorktown. In areas of cone depression near major pumping points, such as the Elizabeth City pumping facility near Old Trap, salt water intrusion has occurred. Salt water has also been found in this aquifer in the southern portion of the County near Camden Point.

LOWER (LOWER YORKTOWN) AQUIFER

This aquifer is actually a lower stratification of the middle or Upper Yorktown aquifer. The water in this aquifer is very similar to that of the middle aquifer in terms of hardness, but is generally more salty, containing greater chloride concentrations. Wells using this aquifer range in depth of from 130 to 165 feet and produce yields ranging from 12 to 40 gpm.

SURFACE WATER

Approximately 25% of the total surface area of Camden County is water(49,900 acres out of 202,400). Most of this surface water area lies in the wide estuaries of the Pasquotank and North Rivers and in portions of the Albemarle Sound.

The Pasquotank River is classified as Class C Swamp Waters from its source to the Norfolk Southern railroad Bridge near Elizabeth City. The river is estuarine from this point to the Sound. Various of the estuarine portion of the river are classified as SC or SB waters --primarily SC.

MAN MADE HAZARDS

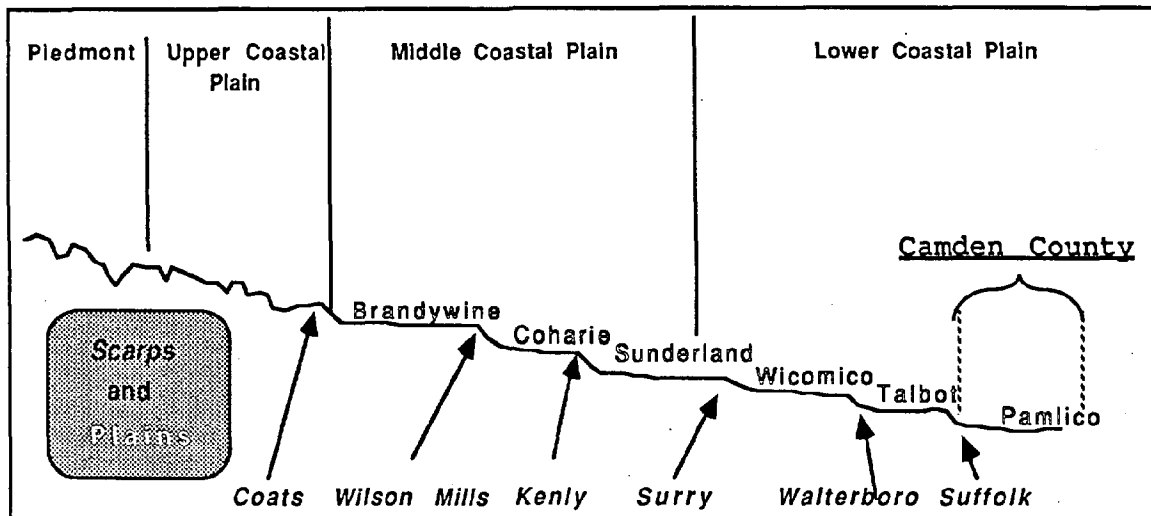
The most prevalent man-made hazards in Camden County are the general hazards and dangers associated with the county transportation network and with storage depots for fuel, chemicals, fertilizers, and grains.

PHYSIOGRAPHY

Camden County lies within the Pamlico Plain section of the Lower Atlantic Coastal physiographic province. The generalized physiography of the area is typical of the coastal plain: wide eastward and southerly sloping plains, separated by eastward facing scarps, stair-step.

ping their way through progressively lower elevation to meet the ocean. The Pamlico Plain slopes eastward from the Suffolk escarpment, which runs from Virginia to south of Wilmington. A section of this escarpment lies along the border of Chowan and Perquimans counties west of Camden County. The figure below, taken from the Soil Conservation Service document, Soil Systems of North Carolina illustrates the stair-step physiography of the coastal plain.

COASTAL PLAIN SUBDIVISIONS: PLAINS and SCARPS



TOPOGRAPHY

Camden County is a combination of broad, nearly level to gently rolling coastal plains cut by moderately deeply cut widely spaced streams which empty into sounds having outlets to the Atlantic Ocean. Elevations in the county are usually below fifteen feet above mean sea level. The highest elevation in Camden County, just 17 feet above mean sea level, is located northwest of Sharon in the northern portion of the county near the Great Dismal Swamp. Except for man-made drainage ditches and canals, slopes in the county seldom exceed 12%. The county generally slopes from north to south and from a center ridge of higher ground outward to the Pasquotank and North Rivers which form, respectively, the western and eastern boundaries of the county.

DRAINAGE

The Pasquotank River, along the western edge of the county, and the North River, along the Eastern edge of the county provide drainage for the county and essentially run parallel on either side of the county. Except for a few very short streams that empty directly into the Albemarle Sound, all drainage occurs via these two rivers. The Pasquotank River, because of its connection to the Dismal Swamp Canal, forms a link in the Intercoastal Waterway navigation system, linking Camden County to the Tidewater Region of Virginia.

GEOLOGY

Surfacial sands and clays of the recent Pleistocene and post-Miocene periods cover the entire county. These upper deposits generally range from 20' to 100' thick, thickening from

north to south. Local deposits of much greater thickness have been found in the southern portion of the county near the Albemarle Sound.

This surficial layer is underlain by the Upper Yorktown formation. This formation generally consists of darker blue to gray clays with deposits of marl, gravel, shells, and impure limestone. The Upper Yorktown ranges in thickness from 135' to 185', generally thickening from north to south and west to east.

The Lower Yorktown formation underlies the Upper Yorktown and generally consists of blue to gray clays, sandy clays, phosphatic quartz sand, and impure limestone. The Lower Yorktown ranges in thickness from 185' to 220', with the greater thickness normally appearing in the southern portion of the county.

The lower Yorktown formation is underlain by the Beaufort formation, which consists largely of glauconitic sands underlain by iron-stained sands and red clays. The thickness of the Beaufort formation ranges from 220' to 400', thickening from west to east.

The Pee Dee formation lies under the Beaufort formation and forms the geologic base for the area. This formation consists primarily of interbedded gravel, sand, silt, and clays. The thickness of this formation ranges from 300' to 700' generally thickening from west to east.

CONSTRAINTS TO DEVELOPMENT: CAPACITY OF COMMUNITY FACILITIES

WATER SERVICES

Camden County does not provide public sewer or water service to any area of the county. One independent water district in the South Mills Township provides water service to approximately 1,050 customers. Elizabeth City, just across the Pasquotank River from Camden County, is now installing water and sewer service across the river onto the causeway area of Camden County along US 158. Elizabeth City has annexed this area of Camden County.

Camden County is considering negotiations with neighboring units of government to provide water service to areas of Camden County.

SOUTH MILLS WATER DISTRICT

The South Mills Water District serves the southern portion of the South Mills Township and a small segment of Pasquotank County. The system contains 100 miles of water lines serving some 1,052 customers and is adding approximately 50 new customers per year. The system uses a well field containing 14 shallow wells, with the deepest well being 42 feet. The wells are pumped at a very low rate to avoid creating conal depressions and to prevent the mixing of salt water from lower strata of the aquifer. One well is capable of pumping 100 gpm; the remainder range in capacities of 15 to 30m gpm. Potable water supplies require careful management is Camden County. They must be shallow and pumped slowly, and they are generally short lived. The South Mills Water District will add five new wells this past summer. The District will use \$72,000 of Camden Counties Senate Bill 2 Monies to extend the water system along NC 342 toward Camden.

The system presently sells approximately 4 to 5 million gallons per month depending on the season. Production in the summer months will average approximately 200,000 gpd. The treatment plant is capable of treating 300 gpm and usually operates 12 to 21 hours per day depending on demand.

The well field cannot provide sufficient water to allow the water plant to operate at design capacity. The plant has to operate 21 hours per day to meet the average summer daily use of 200,000 gallons. The water district storage capacity of 95,000 gallons is less than half the average daily demand for summertime use.

SOLID WASTE

Camden County operates the only county-wide, door-to-door solid waste collection system in the Albemarle Region, maybe in the state. Four fully equipped compactors provide at least once weekly service to all homes in the county. The county contracts with Elizabeth City for use of the city's landfill. The Elizabeth City landfill was put into operation in 1983 and has an expected life of 30 years.

SCHOOLS

The Camden County School System is composed of three separate facilities: Grandy Elementary School; Camden Middle School, and Camden High School. All three facilities are located in the community of Camden, in the Courthouse township near the center of the county and near the intersection of US 158 and NC 343, the two major arterial highways serving the county.

Present enrollment of the entire system is 1,088 students with 338 students being enrolled in the Grandy School, 410 in the Middle School, and 340 in the High School. Maximum capacity of the facilities is 1500 students. Enrollment projections prepared by the Division of Planning and Research indicate a steadily declining enrollment through 1990. All facilities are approximately 25 to 30 years of age and in average condition. No renovation or major repairs beyond routine maintenance are anticipated.

ROADS

There are a total of 192.8 miles of public streets and roads under state maintenance in Camden County. Approximately 71% of all roads in the county are paved, with only 56 miles being unpaved. Primary account for 44 miles of the highway system. The primary roads in the system are US 158, US 17, NC 343, and NC 34.

The only highway improvement listed on the North Carolina Transportation Improvement Plan for 1985 to 1990 is the repair of the Run Swamp Canal Bridge on NC 34 at the Camden - Currituck County line.

POLICE

Police services are now provided by the Camden County Police Department. The department's personnel consists of the sheriff, three deputies, and a radio dispatcher.

FIRE

Fire protection is provided by volunteer units located at South Mills, Camden, Shiloh, and Old Trap.

PUBLIC ADMINISTRATION

Camden County does not have a County Manager. Administrative services are provided by the Clerk to the Board, the Finance Officer, and the Tax Administrator.

CONTINUING PUBLIC PARTICIPATION IN PLANNING MATTERS

Camden County recognizes its responsibility toward keeping its citizens informed of all issues concerning the county. The County Commissioners also recognize the political reality of educating the public in regard to the issues being decided. It is the County's policy to encourage attendance by the public at all meetings of its various boards and committees. The County encourages coverage of all issues by various media representatives and invites active public participation in all issues.

During the preparation of this land use plan update, Planning Board Meetings were held on a regularly scheduled date (the second Tuesday of every month) , and public notices were placed in the local newspaper one week prior to each meeting. A questionnaire was circulated county-wide, soliciting public responses on a variety of planning issues.

The county will rely on public discussion and media coverage to present the various facets, impacts, and costs associated with the various policy issues. Expert assistance will be sought to educate and to give guidance both to the general public and to the Board of Commissioners on issues whenever the Board feels such assistance is required.

POLICY ISSUES

CAMDEN COUNTY: RESOURCE PROTECTION

ISSUE: SOIL LIMITATIONS

FINDINGS:

All the major soil associations in Camden County have limitations to development. The principal limitation to development being either a shallow depth to water table or frequent flooding. There are areas with pocket of soil that display characteristics different from that of the general soil association; these areas or pockets will be mapped and available once the detailed soil survey now being prepared for the county is complete and published.

Severe slopes in excess of 12% do not exist in the county to any appreciable degree.

PREVIOUS 1981 POLICY:

"The county will direct development with proper consideration of soils."

CURRENT 1986 POLICY

Development will be allowed if it complies with County Health Department septic tank permitting requirements and with local development controls.

IMPLEMENTATION STRATEGIES:

The county building inspector will enforce the provisions of the North Carolina Building Code concerning construction on soils with structural limitations.

The county will coordinate its subdivision permitting process with local representatives of the U.S. Soil Conservation Service and seek that agency's assistance for proper soils management.

The county shall support state erosion control standards for construction projects that clear, alter, or excavate land in excess of one acre.

ISSUE: PROTECTION OF POTABLE WATER SUPPLY

Protection of potable water supplies is of critical concern in Camden County. Fresh water supplies occupy a very narrow stratum of the watertable aquifer. Most wells over 50 feet in depth begin to draw salt water making them unusable as a potable supply. In a county where septic tanks are the only means of sewage disposal, where the water table is generally within four feet of the surface, and where very shallow wells must be pumped slowly to avoid salt-water mixing, strict control and management of water resources is essential.

Septic leakage from improperly placed or poorly constructed septic systems in less than minimum sized lots creates a serious threat to this precious and fragile resource. A number of older county neighborhoods built before there were minimum lot sizes creates just such a problem.

PREVIOUS 1981 POLICY:

None

CURRENT 1986 POLICY

It is be the policy of Camden County to protect the County's fresh water supply by strictly enforcing the lot size requirements of the State Department of Health on all developments in the county.

IMPLEMENTATION STRATEGIES:

The County now requires a minimum lot size of 20,000 to 40,000 square feet depending on the soil characteristics as determined by the County Health Officer.

The county will seek financial assistance from available sources to construct sewage facilities to correct the critical sewage disposal problems.

ISSUE: INDUSTRIAL IMPACT ON FRAGILE AREAS
--

FINDINGS:

There are no major manufacturing industries in Camden County. Manufacturing establishments in the county consist of small manufacturers of forest related products and one manufacturer of concrete products. None of these industries are located on areas that can be considered fragile.

The County Zoning Map identifies two areas for industrial development. These areas are on soils that are capable of supporting such development.

PREVIOUS 1981 POLICY:

None

CURRENT 1986 POLICY:

The County will encourage industry to develop in the land use zones presently identified and so designated on the County Zoning Map.

IMPLEMENTATION STRATEGIES:

The County Planning Board shall restrict the industrial zone classification to only those areas with soils that can support such development. Industries seeking to develop in areas not now classified as industrial zones must demonstrate to the Planning Board and The County Commission that the site can be developed for industrial use with out causing lasting damage to the environment.

ISSUE: STORMWATER RUN-OFF: RESIDENTIAL DEVELOPMENT

FINDINGS:

Residential development in Camden County is typical of most rural areas; widely spaced homes of large sized lots. Development densities are generally one residential unit per acre. Minimum lot sizes are 20,000 square feet, but seldom is a unit permitted at the minimum lot size most are built on lots of 40,000 square feet or more. Residential runoff, generally does not pose any threat to the fragile lands or the surface waters in the county.

The development along the causeway in Camden County, however, does pose a potential threat to surface water quality. Present development along the causeway is rather limited, consisting of only a marina, a restaurant, and an ABC Package Store. Elizabeth City is now extending sewer and water service into the causeway area. The primary reason for the extension is to provide service to a twelve-unit, three-story, multi-family building now under construction on the causeway.

The causeway area contains all of the AEC land categories present in Camden County: Estuarine Shoreline, Coastal Wetlands and Estuarine Waters.

PREVIOUS 1981 POLICY:

None

CURRENT POLICY:

It is the policy of Camden County to regulate the amount and percentage of building coverage on any developable lot. The county will study the possibility of extending prohibitions to include all impervious surfaces on buildable lots.

IMPLEMENTATION STRATEGIES:

The Planning Board shall examine the possibility of creating development regulations to control the amount of impervious surfaces that may be permitted on a building lot.

The county will consider amending the County Subdivision Regulations to require a drainage for major subdivision developments.

ISSUE: STORMWATER RUN-OFF: AGRICULTURAL

FINDINGS:

Nutrient loading of the surface waters of the North and the Pasquotank Rivers from storm water runoff from agriculture lands has generally not been a recognized problem in the county. No studies are available that describe the scope and extent of this problem are available. In general the farmers in the county recognize the potential dangers to the surface waters in the area from the rapid loading of fertilizer enriched stormwater into the drainage basins of the county and to a great extent have initiated best management recommendations of the Soil Conservation Service

PREVIOUS 1981 POLICY:

None

CURRENT 1986 POLICY:

It has always been the Policy of the Camden County Board of Commissioners to encourage use of the best management practices recommendations of the U.S. Soil Conservation Service.

IMPLEMENTATION STRATEGIES

The county will encourage local farm organizations to maintain on-going educational programs and demonstrations that will keep farmers informed of the best management practices and assistance available

ISSUE: MANMADE HAZARDS

FINDINGS:

Primary manmade hazards and nuisances in Camden County are the transportation network and storage facilities for fuel, fertilizers, chemicals, and grain.

The transportation network presents the greatest hazard to life and limb. The county's zoning provides no control governing the number, width, or spacing of points of egress and access from properties to the transportation system.

Unpermitted dumps identified in the previous land use update seem to have all but been eliminated by the County's county-wide, door-to-door solid waste collection program

PREVIOUS 1981 POLICY:

" The county will minimize the adverse impact of manmade hazards upon humans and adjacent development"

CURRENT 1986 POLICY:

The county will use its present development controls to minimize the adverse effects of manmade hazards.

IMPLEMENTATION STRATEGIES:

The county will require buffer zones between fuel, chemical and grain storage facilities and any other non related use.

The county will consult with the NC Department of Transportation concerning entrance and exit dimensions for various types of businesses and residential densities.

ISSUE: CULTURAL OR HISTORICAL RESOURCES

FINDINGS:

Six sites in Camden County are presently listed on the National Register of Historic Places;

1. Caleb Grundy House
2. Camden County Courthouse
3. Milford
4. William Riley Abbot House
5. Lamb-Ferebee House
6. Camden County Jail

More than a dozen additional sites are potential candidates for nomination. In addition to these architectural sites the Great Dismal Swamp is a unique portion of the county's landscape that is of historic and National Significance.

A recent proposal by area residents has requested that a Visitors Information Center be constructed along Highway U.S.17 in the swamp. This development means to use the unique character of the swamp as a promotional tool for economic development.

PREVIOUS 1981 POLICY:

"The county will guide development so that it protects the historic and potentially historic properties in Camden County and perpetuates the county's cultural heritage."

CURRENT 1986 POLICY

Same as previous policy

IMPLEMENTATION STRATEGIES:

The county will encourage a county wide survey of the historical sites by the local Historical Society. The county will consider seeking a grant for a complete inventory of historically significant structures and sites.

ISSUE: FRESH WATER, SWAMPS, AND MARSHES

FINDINGS:

In Camden County swamp and marsh cover 40% of the land area. These areas are important in that they help to slow erosion and provide filtering for contaminants and retainage basins for excess nutrients. These areas produce many organisms vital to the lower order of the food chain.

While these areas are not likely to experience any major development pressures in the near future nor be the location for major residential development, they are frequently drained and cleared for agricultural uses. Excessive run-off from development could alter the natural functioning of these lands.

Draining of swamps for agricultural purposes has been almost eliminated by the enforcement of the swamp-buster laws.

PREVIOUS 1981 POLICY:

"It shall be the policy of Camden County to preserve the integrity of the swamp ecological function."

CURRENT POLICY

Camden County will rely on existing local land-use ordinances and state and federal agencies with permitting jurisdiction to regulate development in these areas.

IMPLEMENTATION STRATEGIES:

Wooded swamps shall be designated Conservation Areas on the Land Classification Map and their use restricted to those of Coastal Wetlands.

ISSUE: SEPTIC TANK LIMITATIONS

FINDINGS:

All General Soil Associations in Camden County are subject to either severe or very severe limitations to septic tank use. Limitations are due primarily to a high water table and flooding. There are several residential areas in the county with densities greater than the health departments minimum that have severe septic tank problems.

PREVIOUS 1981 POLICY:

None

CURRENT 1986 POLICY:

The county shall require subdivisions proposals be first reviewed by the County Health Officer and the Soil Conservation Service and comments received from those two agencies before any consideration of approval.

IMPLEMENTATION STRATEGIES:

The installation of all septic systems shall require a permit from the County Health Officer who shall investigate the proposed site and make assessments as to soil suitability, space requirements, construction requirements, and placement of the proposed system. The issuance of a permit shall require the compliance of all restrictions mandated by the permitting officer.

The county will work closely with the Soil Conservation Service and other agricultural agencies to ensure the proper construction and placement of agricultural lagoons.

The county could require some other type of waste disposal in older subdivision where lots are small and density is high.

ISSUE: FLOOD PLAINS

FINDINGS:

Flooding is a potential problem in approximately 50% of the county according to the Flood Plain Boundary maps prepared by the Federal Emergency Management Agency. Flood plain areas essentially ring the county along the shores of the North and Pasquotank rivers, the Albemarle Sound, and the extensive swamp areas in the northern and southern sections of the county. the greatest flood threat in the county is storm surge and wind tides, particularly in the Camden Point area.

PREVIOUS 1981 POLICY:

"The county will protect areas prone to severe flooding from improper development."

CURRENT 1986 POLICY

The County shall enforce its flood plain development ordinance to minimize the threat to life and property from flooding.

IMPLEMENTATION STRATEGIES:

Camden County is participating in the regular phase of the Federal Flood Insurance Program. The required ordinance has been adopted and the standards are being enforced.

Subdivision regulations shall require elevation monuments to be set so that flood plain elevations could be more easily determined.

POLICY ISSUES:

RESOURCE PRODUCTION AND MANAGEMENT

ISSUE: PRODUCTIVE AGRICULTURAL LANDS

FINDINGS:

The 1982 census of Agriculture reported that of Camden County's approximately 202,000 acres, 52,500 acres were harvested cropland. Most of the county is suitable for agricultural production. The best agricultural areas, according to the soil associations, occurs as borders between the low marsh areas and the inland plain area. The least suitable areas are those in the swamps and flood plains.

PREVIOUS 1981 POLICY:

"To achieve maximum sustained yields from Camden County in a manner which is consistent with other development goals."

ALTERNATE POLICIES:

The county will use what means it has to encourage productive to remain productive agricultural lands.

IMPLEMENTATION STRATEGIES:

The County will seek assistance from NRCD for the revision of its existing Zoning ordinances to require excessive lot sizes for single family development on prime agricultural lands.

ISSUE: COMMERCIAL FOREST LAND

FINDINGS:

Roughly 70% of the land in Camden County is forest land. Most of this area is located in the swamp areas of the county. While a large percentage of the land is devoted to forest or wooded areas only 20% of this wooded land is actually suitable for conventional forest production. The conversion of forested lands to agriculture production and the lack of reforestation has reduced the total acreage of wooded lands in the county, however, most of the county still remains in forest. Commercial forest lands numbered 107,000 acres in 1978, by 1985 the estimated acres of commercial forest lands had diminished to 97,000 acres.

PREVIOUS 1981 POLICY:

None

CURRENT 1986 POLICIES:

Camden County will encourage reforestation of clear cut timber lands as a sound forest management practice.

IMPLEMENTATION STRATEGIES:

The county will continue to encourage the use of best forestry management practices .

ISSUE: COMMERCIAL AND RECREATIONAL FISHING

FINDINGS:

Commercial fishing has not been a significant factor in the Camden County economy in the past. Records from 1982 and 1983 show that there were 79 and 80 licensed boats in those respective years. Dockside value of the commercial catch in 1983 was \$45,196. Total catch was 69,637 pounds.

PREVIOUS 1981 POLICY:

None

CURRENT POLICIES:

The county encourages commercial and recreational fishing in its waters and will cooperate with other local governments, federal and state agencies to control pollution of these waters to conditions that commercial and recreational fishing will increase.

IMPLEMENTATION STRATEGIES:

The county will seek assistance from the Department of Natural Resources and Community Development and the Wildlife Resources Commission to develop additional public access and public boat ramps.

ISSUE: RESIDENTIAL AND COMMERCIAL LAND DEVELOPMENT IMPACT ON ANY RESOURCE

FINDINGS:

Residential and commercial development in Camden County during the past five years has not been significant. The County has averaged fewer than 40 new dwelling units annually since 1983, with approximately two-thirds of these new units being mobile homes. Only one Building Permit has been issued for a new commercial structure. Most of the new development occurring during the past five years has occurred in areas classified as "Community" in the previous Land Use Update. Regardless of the land classification, almost any new development in Camden County must take a small portion of agricultural or forest lands out of production.

PREVIOUS 1981 POLICY:

None

CURRENT 1986 POLICIES:

Agricultural land, as well as forest land, are very important resources to Camden County. The county should encourage development away from prime agricultural and forest land to areas less suitable for these two types of land use.

IMPLEMENTATION STRATEGIES:

Create excessive lot sizes for all non agricultural development on prime farm lands

ISSUE: INDUSTRIAL DEVELOPMENT IMPACT ON ANY RESOURCE

FINDINGS:

Because of the lack of industry in Camden County this is not an issue.

PREVIOUS POLICY:

None

ALTERNATE POLICIES:

This is not an issue.

IMPLEMENTATION STRATEGIES:

ISSUE: PEAT OR PHOSPHATE MINING IMPACT ON ANY RESOURCE

FINDINGS:

This is not an issue in Camden County.

PREVIOUS POLICY:

None

ALTERNATE POLICIES:

This is not an issue.

IMPLEMENTATION STRATEGIES:

IMPLEMENTATION STRATEGIES:

ISSUE: OFF ROAD VEHICLES

FINDINGS:

As far as protection of ocean sand dunes from off road vehicles, this is not an issue in Camden County.

PREVIOUS POLICY:

None

ALTERNATE POLICIES:

This is not an issue.

IMPLEMENTATION STRATEGIES:

ISSUE: MARINA AND FLOATING HOME DEVELOPMENT

FINDINGS:

Camden County has one operating public marina located on the causeway just across the Pasquotank River from Elizabeth City. The Elizabeth City Yacht Club also operates a private marina on the causeway. The county has no floating home development. Permits or Zoning amendments for new marina development have not been requested during the past five years.

POLICY:

None. This is not an issue at this time.

IMPLEMENTATION STRATEGIES:

None

POLICY ISSUES: ECONOMIC AND COMMUNITY DEVELOPMENT

ISSUE: TYPES AND LOCATION OF INDUSTRY

FINDINGS

Manufacturing in Camden County is very limited. Only 60 persons are employed by manufacturing establishments located in the county. Manufacturing in Camden County is limited to small manufacturers of forest products and one manufacturer of concrete products. All employment growth in the county has been in the retail and wholesale sectors or in the construction and service industry sectors. Given the severe soil constraints in the county, the lack of available public facilities, and the two-lane transportation bottleneck of U.S. 17 into Virginia and the Tidewater Market area, a significant increase in manufacturing employment is not expected during the planning period. The most likely source of new employment will continue to be the retail and service sectors.

The Camden County Zoning Map designates two large tracts near Belcross for industrial uses. These locations are on some of the most suitable land for industrial development in the county and have convenient transportation access to U.S. Highway 158 and NC State Highway 34. These areas are not presently served by public water or public sewer. These sites provide sufficient space for any anticipated industrial growth during the planning period.

New retail and service sector establishments will most likely seek locations along U.S. 158 to capitalize on the greater visibility along this highway, on the proximity to larger more concentrated markets such as Elizabeth City, and on greater exposure to the heavy traffic flow from points west to the Dare County beaches. The availability of public facilities from Elizabeth City onto the causeway area in Camden County will also encourage more development and permit greater development densities along this portion of the causeway.

PREVIOUS 1981 POLICY

"To encourage location of light industry within Camden County, provided certain performance standards are met, and that industry is located near existing communities and does not use prime agricultural land." (Camden County Land Use Plan 1980-1990, Terry Alford Planning and Design Association, P.38)

CURRENT 1986 POLICY

Camden County is not interested in becoming a major manufacturing center, nor a haven for low-paying sweat shops. The residents in Camden County enjoy the rural atmosphere of the county and will strive to maintain this way of life through very selective recruitment of industrial establishments and through very active discouragement of unwanted development.

Camden County realizes that employment gains are most likely to occur in the retail and service industry sectors and that such establishments will seek locations that provide high visibility, heavy traffic flow, and proximity to greater market concentrations. The county will rely on its existing land-use and development ordinances

to regulate these developments and will amend or modify existing regulations to impose greater control as the need arises.

IMPLEMENTATION STRATEGIES

The County will pursue financial assistance to provide water service to the two areas now designated as industrial zones by the zoning map.

The County will request assistance from the Division of Coastal Management to update its existing Zoning Ordinance to include more performance controls for commercial and industrial development.

<i>ISSUES: LOCAL COMMITMENT TO PROVIDING SERVICES FOR DEVELOPMENT</i>
--

FINDINGS:

The only public facilities available in Camden County are the county-wide collection and disposal service and the water service provided by the South Mills Water District.

The South Mills Water District provides water service to approximately 1052 customers in the northern portion of the county. The system is presently selling all the water the wells in the system can provide. The availability of fresh water in the district is minimal, and it is unlikely that the system could provide service to a major water user without drilling a new well field.

Elizabeth City is presently extending water and sewer service across the Pasquotank River into Camden County to serve development on a portion of the U>SS> 158 Causeway.

Efforts are underway to obtain an agreement with Currituck County for the supply, maintenance, and management of a waterline extension from the Currituck County line along U>SS> 158 toward Belcross.

PREVIOUS POLICY:

"To provide significant forms of local commitment toward providing services to development." (Camden County Land Use Plan 1980-1990, Terry Alford, Planning and Design Assoc., P.A., p.40)

CURRENT POLICIES:

Population densities in Camden County do not justify the enormous debt obligation required to provide public water and sewer services on a county-wide basis. It shall be the county's policy to pursue water service for new and existing development by encouraging the extension of water services from existing nearby water systems.

Camden County shall continue to provide solid waste collection and disposal services to all developments in the county.

IMPLEMENTATION STRATEGIES:

To lend support (other than financial) to the South Mills water Association in its effort to obtain water required to meet existing demand for water system.

Camden County shall pursue negotiations with Currituck County toward a possible agreement for water service extension into Camden County.

The County shall pursue financing options including a bond referendum, to obtain financing for a water line from the Currituck County Line into Camden County.

ISSUE: TYPES OF URBAN GROWTH PATTERNS DESIRED

FINDINGS:

The development pattern in Camden County has historically been nodal, with small concentrations of residential and commercial development occurring at crossroad communities. This pattern has continued up through the present as most development continues to occur in and around these nodal communities. Some of these nodes along U.S. Highway 158, however, could expand to the point where they form a continuous strip of development from Elizabeth City to Belcross.

Development pressures along this strip will come primarily from new commercial interests aimed at ambushing innocent passers-by on their way to the Dare County beaches. At present most commercial development to these areas primarily serve community residents on a year-round basis.

Existing County policy regarding seeking outside vendors to provide water service will have the tendency to encourage strip type development and concentrate subdivision activity along the routes of the water lines.

PREVIOUS POLICIES:

1) Residential

"To develop permanent residences in accordance with the zoning ordinance and to develop summer and waterfront recreational homes in areas shown on the Land Classifications as 'community' (and to a lesser extent 'rural residential')."

2) Commercial

"To promote commercial development that is designed to directly relate to other commercial activities, and in the pattern prescribed in the Land Classification Map."

3) Cultural, Institutional, and Recreational Development Pattern

"To develop the cultural and institutional land use in accordance with the Land Classification Map, in the categories designated 'transition' and 'community', and otherwise protect the existing patterns of such development elsewhere."

4) Agricultural and Forestry Development Patterns

"To concentrate agricultural and forestry uses outside the existing Town limits as shown on the Land Classification Map."

CURRENT POLICIES:

It shall be the policy of the Camden County Commission that to the maximum extent possible it will maintain the integrity of the existing Zoning Districts.

IMPLEMENTATION STRATEGIES:

While development pressures are likely to escalate during the next ten years, the limitations imposed on development by the lack of public sewer and the large lot sizes required for septic tank absorption fields prevent any unusually large concentrations of population or housing units from occurring. It shall be the County's policy to rely on existing land use and development ordinances to regulate the location and density of development in the county.

Most lands not now included in existing urban clusters are zoned for Agricultural use; any development of more than three lots must be presented before the Planning and Zoning Board and a Zoning Map Amendment requested. The County will rely on the actions of the Planning and Zoning Board and the actions of the County Commissioners to control the location and development of areas away from existing urban clusters.

ISSUE: REDEVELOPMENT OF DEVELOPED AREAS

FINDINGS:

During the spring of 1985, the Regional Development Institute at East Carolina University carried out a Housing Conditions Survey and an Inventory of Available Housing for Camden County. One of the purposes of the survey was to identify concentrations of substandard housing in the county. The results of the survey indicate that approximately one-third of the available housing stock in the county is substandard and that six areas exist that contain concentrations of substandard housing.

The areas identified were:

1. The Bloodfield Road area near South Mills
2. Sawyers Ferry
3. Hastings Corner
4. Belcross
5. Bartlett
6. South Shiloh

Discussions with county health officials revealed that there are several developed areas in the county where homes are built on lots that are too small to provide adequate absorption of septic effluents. These systems usually malfunction, causing sewage to back-up into the plumbing facilities inside the home. Most of these homes belong or are occupied by families with very limited incomes who cannot afford to purchase additional lands for additional absorption fields; in some cases there are simply no suitable lands nearby to adequately treat the effluent. The

sewage seepage from these areas poses severe threats of contamination to the groundwater. This is of particular concern in Camden County, where the water table generally within three feet of the ground surface and where most residents are served by very shallow wells because of the frequent intrusion of salt water into the fresh water aquifers.

PREVIOUS POLICY:

"To encourage redevelopment of existing communities, primarily those designed as 'transition' and 'community', especially regarding commercial and residential development." (Camden County Land Use Plan 19800-1990, Terry Alford Planning and Design Assoc., P.A., p.44)

CURRENT POLICIES:

It shall be the policy of Camden County to seek financial assistance from all agencies providing assistance for the repair or reconstruction of privately owned dwelling units. The County will seek Community Development Block Grant assistance for the identified areas of substandard housing.

The County will cooperate fully with Health Department officials to ensure that all future development occurs on lots of sufficient size to provide adequate sewage treatment, and will seek financial assistance from various State and Federal Agencies to correct existing hazards.

IMPLEMENTATION STRATEGIES:

The County will develop Community Revitalization Plans for all identified communities containing areas of substandard housing concentration. These plans shall include Economic and Commercial Development Strategies, Housing Improvement Plans, and Public Facilities Provision Strategies.

The County will seek Federal and State financial assistance for financing community improvements.

The County will encourage the development of community based organizations to promote community leadership for the implementation of Community Revitalization Plans.

ISSUE: TOURISM AND WATERFRONT ACCESS

FINDINGS:

Camden County at present has no public access to the waterfront. Several state roads dead end at or very near the water front and are used by many county residents as public access. The County does not have sufficient unobligated revenues to purchase water front properties for public access..

The County encourages the private development of waterfront access and will study the option of amending existing development ordinances to include requiring public waterfront facilities.

PREVIOUS POLICY:

Though the County Commissioners realize that there is a need for public access to the waterfront the county does not have funds to provide these facilities.

CURRENT POLICIES:

The county encourages the development of private or public access at the following sites: Old Shipyard Road, Neck Road, and at the end of Hwy 343.

IMPLEMENTATION STRATEGIES:

The County shall study the possibility of amending its existing subdivision regulations to include provisions to require developers to donate cash or land for the provision of public waterfront access.

**ISSUE: TYPE OF DENSITIES, LOCATIONS: UNITS PER ACRE ETC.
OF ANTICIPATED RESIDENTIAL DEVELOPMENT AND
SERVICES NECESSARY TO SUPPORT SUCH DEVELOPMENT**

FINDINGS:

The severe limitations of the Camden County soils preclude any development densities of more than one dwelling unit per acre in most portions of the county. Elizabeth City is now extending public sewer service across the Pasquotank River to a portion of the causeway area in Camden County. this is the only area in the County that could possibly support densities greater than one unit per acre.

PREVIOUS POLICY:

None

CURRENT POLICIES:

Present Camden County zoning ordinance and subdivision regulations do not permit residential development at densities greater than one unit per twenty thousand square feet. This shall continue to be the policy in Camden County.

IMPLEMENTATION STRATEGIES:

None needed.

**ISSUE: COMMITMENT TO STATE AND FEDERAL
PROGRAMS IN THE AREA**

FINDINGS:

It has been the policy of Camden County to support such programs which it feels necessary and cost effective to support.

PREVIOUS POLICY:

The county will selectively support state and federal programs related to Camden County.

CURRENT POLICY:

Same as previous policy.

IMPLEMENTATION STRATEGIES:

None

ISSUE: ENERGY FACILITY SITING AND DEVELOPMENT

FINDINGS:

Camden County considers the possibility of the siting of an energy production facility in the county to be very remote. Therefore, no policy on this issue is considered necessary. However, should this become an issue in the future, a policy will be developed at the appropriate time.

PREVIOUS POLICY:

None

CURRENT POLICIES:

None

IMPLEMENTATION STRATEGIES:

None

ISSUE: PACKAGE TREATMENT PLANTS

FINDINGS:

The Camden Zoning Ordinance permits development using package treatment plants. Minimum lot sizes can be as small as 6,000 square feet. At present there are only a few plants operating in the county mainly serving restaurant operations and mobile home parks. The maintenance and operations of these plants are controlled by the Division of Environmental Management. There are a number of high density, low-income residential neighborhoods with severe septic tank problems that could benefit from a community package treatment plant.

PREVIOUS 1981 POLICY

None

CURRENT 1986 POLICY

The county will rely on the Division of Environmental Management to oversee the operation and management of all package treatment plants in the county.

The county will investigate the possibility of using package treatment plants as a method of solving some of the severe sewage disposal problems in several of its communities.

IMPLEMENTATION STRATEGY

The county will submit a grant application to the proper agencies requesting aid in correcting the serious sewage problems affecting various county neighborhoods.

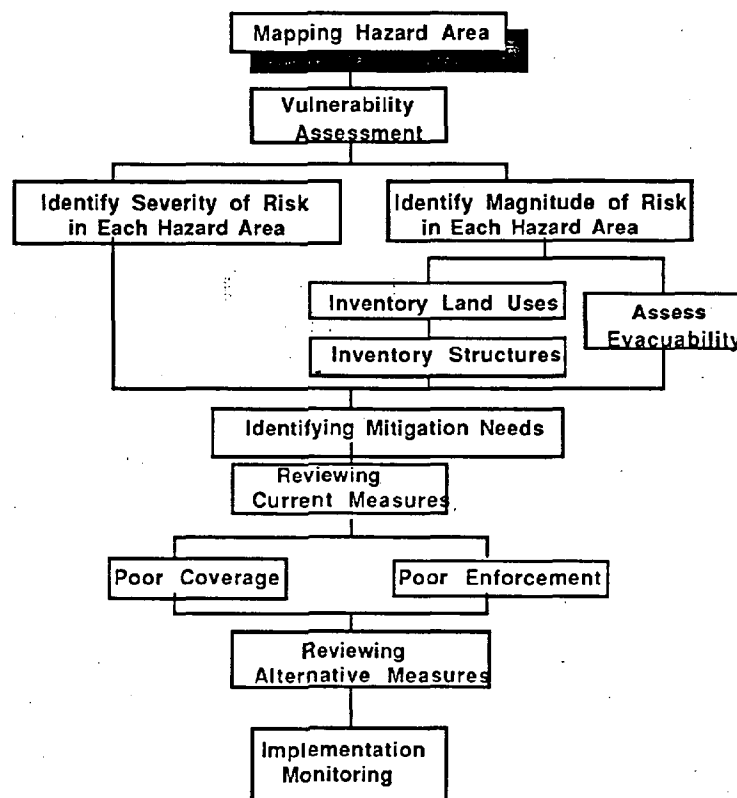
STORM HAZARD MITIGATION, POST-DISASTER RECOVERY PLAN

The purpose of this section is two fold:

- 1) to assist the county in managing development in those areas most likely to suffer damages from a severe storm or hurricane and
- 2) to reduce the risk to life and property from future hurricanes.

High winds, flooding, intense wave action, and coastline erosion are the four physical forces of a severe storm or hurricane that create threats to life and property. Flooding claims the most lives during severe storms or hurricanes; high winds cause the most property damage. Only by identifying those areas in the county most likely to suffer damage from any of these forces or combination of these forces can a community develop a meaningful storm mitigation plan.

Using the planning scenario recommended in *BEFORE THE STORM: Managing Development to Reduce Hurricane Damages*, by McElyea, Brower, and Godschalk, the community can identify the areas most likely to sustain storm damages and make a vulnerability assessment of the identified storm hazard area. The vulnerability assessment includes the severity and magnitude of risk in each storm hazard area. The following chart taken from *BEFORE THE STORM* outlines the procedure and the sequence of steps used in the storm hazard mitigation process.



STORM HAZARD AREA

The following Composite Hazard Map indicates those areas in Camden County most likely to sustain damage from flooding and other water related hazards, such as wave action and shore erosion. The map is a composite of the flood hazard areas indicated on Slosh Maps prepared by NC Division of Emergency Management and of identified Areas of Environmental Concern located in the county. All of the county is assumed to be susceptible to wind damage, so this area is not mapped.

VULNERABILITY

Vulnerability of an area is measured by both the severity and magnitude of risk. The severity ranking is based on the number of physical forces likely to affect a particular identified storm hazard area. The rankings suggested by McElyea, Brower, and Godschalk is a scale from 1 to 4. Areas likely to receive damage from all four physical forces of a hurricane are ranked as 1; those receiving only wind damage are ranked as 4. The magnitude of risk is based on the population and the number and value of developed properties in the storm hazard areas.

Severity of Risk

The table below ranks the severity of risk associated with the identified storm hazard areas in the county and the physical forces affecting the different areas.

RISK TABLE FOR HAZARD AREAS

HAZARD AREA	EXPOSURE TO DAMAGING FORCES				
	SEVERITY RANK	EROSION ACTION	WAVE	FLOODING	HIGH WIND
ESTUARINE SHORE	1	+	+	+	+
COASTAL WETLANDS	2	0	+	+	+
FLOOD HAZARD AREA	2		+	+	+
REST OF THE COMMUNITY	4				+

Exposure Level: (+) High, (0) Moderate, (#) Low

MAGNITUDE OF RISK

As the Risk Table shows, severe storms and hurricanes most seriously affect the estuarine shoreline. All four physical storm forces inflict damage to this narrow, 75 foot ribbon of land. Storm experience in Camden County, however, indicates that wind damage causes the greatest damage. Recent storm experience with Hurricane Charlie and Gloria seem to bear out this observation. Neither of these storms can be classed as Category III Storms. Earlier storm experience with more severe storms (Hazel, Connie, and Ione) inflicted heavier water damage, particularly wave action along the Sound at Camden Point.

Knowledgeable persons estimate the monetary damage of these storms at approximately \$2,000,000. While the largest platted subdivision in the county is located at Camden Point, it is very sparsely developed. Most structures are built of extensive fill material to elevate the structures from the water table, which is often above ground in this area. Health Department Regulations and FEMA Regulations have severely curtailed this practice.

Estuarine Shoreline

Land uses in this area are generally water related: private piers, boat docks, and bulk-heading. The shoreline in Camden County is frequently at or only slightly above the mean high water mark. Wave damage, flooding, and shoreline erosion cause the greatest damage to the shoreline.

Coastal Wetlands

Flooding, wave action, and erosion all affect coastal wetlands. These areas are not mapped, but in Camden County they most frequently occur along the shores of the Pasquotank and Little Rivers and along the short streams that drain into these bodies of water. There is no development directly in these areas, most improvements consist of piers, decks, walkways.

Flood Hazard Areas

The risk and magnitude of flood damage is greatest along the sound at the southern tip of the County. This area is generally swamp, and well below the 100-year flood hazard elevation. Since the county entered the regular phase of the National Flood Insurance Program in 1985, all structures located in flood prone areas must comply with FEMA regulations governing construction in the flood plain.

The Rest of the Community

High winds cause most of the property damage in Camden County, simply because they affect all properties. Damage is of two types: 1) direct wind damage, and 2) indirect wind damage from downed trees, wind-born debris, and downed utility lines. Wind damage potential increases almost exponentially as the number of mobile homes in the county increases.

EVACUABILITY

Camden County participates in a joint Evacuation Plan along with Pasquotank County and Elizabeth City. Several Shelter areas are designated and staffing is arranged. Most shelter areas are located in Pasquotank County and Elizabeth City. Shelters in Camden are located at Camden and South Mills. The county's most critical severe storm need is evacuating the Camden Point Area. This area, as has been stated earlier, is peculiarly vulnerable and roads leading to higher ground are often only slightly above the mean high water mark even in dry weather. The evacuation plan anticipates the problems with this area by making it the first in order of evacuation with a six hour lead time.

POLICY STATEMENTS: STORM HAZARD MITIGATION

***ISSUE: Mitigation of Storm Damage From High Winds ,
Flooding, Wave Action, and Erosion***

FINDINGS:

County areas affected by the various storm hazards are as follows:

Hazard	Area Affected
High Wind	Entire County
Flooding	100-year Flood Hazard Area Public Trust Waters, Coastal Wetlands, Estuarine Shoreline
Erosion	Estuarine Shorelines, Coastal Wetlands
Wave Action.....	Estuarine Shorelines, Coastal Wetlands

The greatest collective damage is from wind damage because the whole county is affected. Most seriously affected developed areas are those with property improvements in flood plains areas. Greatest risk potentials are the Flood Hazard Areas.

CURRENT 1986 POLICY:

It will be the policy of Camden County to enforce all controls and regulations it deems necessary to mitigate the risk of severe storms and hurricanes to life and property.

IMPLEMENTATION STRATEGIES:

1) High Winds

Camden County will follow and support the N.C. State Building Codes and their requirements regarding design for high velocity winds. The County also supports requirements for mobile homes such as tiedowns that help reduce wind damage. Camden County enforces construction and mobile home installation standards for 100-mph winds.

2) Flooding

Camden County will support the hazard mitigation elements of the National Flood Insurance Programs. Camden County, which is in the regular phase of this program, supports regulations regarding elevation and flood-proofing of buildings and utilities. The county also supports CAMA and 404 Wetland Development Permit processes.

3) Wave Action and Shoreline Erosion

Camden County continues to support the CAMA permitting procedures concerning the estuarine shoreline. The county also supports the FEMA regulations concerning elevation and setback requirements.

POST DISASTER AND RECOVERY PLAN

Camden County proposes the following Disaster Recovery Plan as a general outline of the procedures the County will follow in the event of a major disaster. The plan includes a timetable for carrying out recovery activities and a list of personnel who will be responsible for each component of the plan.

PURPOSE:

This plan has been developed to provide for an orderly and coordinated recovery and reconstruction of areas of Camden County suffering the effects of a major disaster. The underlying goals of this plan are to minimize the hardships to affected residents, to restore and initiate reconstruction in a timely manner, and to reduce or eliminate any bottlenecks in securing Federal or State Disaster Assistance.

ORGANIZATION:

The Board of County Commissioners will function as the Camden County Recovery Task Force. The mission of the task force is to direct and control recovery activities and to formulate recovery policies as needed.

SUPPORT TEAM:

The County Commissioners will designate the following Recovery Support Team to assist in the implementation of this plan. The mission of the support team is to provide personnel and resources for the implementation of recovery activities as directed by the Recovery Task Force.

SUPPORT TEAM COMPOSITION AND RESPONSIBILITIES:

Camden County Emergency Management Coordinator: To manage, control, and coordinate the efforts of the support team.

Sheriff: To provide additional surveillance in the disaster area; to locate obstructions to traffic; and to advise the County Manager of the location of downed transmission lines, ruptured water lines, etc.

Tax Supervisor: To provide and direct personnel in carrying out damage assessment; to prepare damage assessment reports for the Recovery Task Force; and to revise property records.

Building Inspector: To assemble personnel and to conduct a survey of structural conditions in the disaster area; to coordinate actions with the Tax Supervisor, and to prepare structural damage reports and classifications of damages.

Social Services Director: To provide personnel to assist in finding shelter for persons who are homeless; to assist applicants in requesting aid from various state and federal agencies providing disaster relief.

County Health Officer: To conduct damage assessment of on-site water supplies and sewage disposal systems; to prepare damage reports; and to make recommendations concerning restoration and reuse of on-site systems.

SCHEDULE OF ACTIVITIES

Recovery activities will consist of two types: preplanned activities that can begin immediately or as soon as is reasonably possible after the storm has passed; and long-term, permanent reconstruction activities that will be begun once the extent of the damage is known.

IMMEDIATE ACTION:

- 1) Declare a moratorium on all repairs and development
- 2) Begin clean-up and debris removal
- 3) Coordinate the restoration and repair of electrical service to affected areas
- 4) Begin Emergency repairs of essential public facilities
- 5) Maintain additional surveillance and extra security measures in affected areas
- 6) Deploy assessment teams
- 7) Prepare assessment reports

These immediate actions should be completed within ten days of the storm event.

LONG TERM RECONSTRUCTION ACTIONS:

- 8) Evaluate, classify, and map damages
- 9) Review of moratorium decision
- 10) Establish priorities for public facilities repair
- 11) Submit damage report to State and Federal agencies
- 12) Notify affected property owners of damage classifications and required repairs
- 13) Lift moratorium on repairs not requiring permits
- 14) Lift moratorium on siting of replacement mobile homes
- 15) Lift moratorium on conforming structures requiring major repairs
- 16) Assist affected property owners with damage registration and filing request for disaster relief
- 17) Negotiate with property owners needing improvements to on-site water and sewage systems
- 18) Lift moratorium on repairs and new development

The duration of the reconstruction and recovery period will depend on the nature and extent of the storm damage. Repairs of minor structural damages should be able to commence within two weeks of the storm event.

DAMAGE ASSESSMENT

As soon as possible after the storm, the assessment teams will be deployed to measure the extent and nature of the damages and to classify structural damages to individual structures. The

inspection teams will consist of the County Building Inspector, the County Health Officer, and the Director of the County Water System.

The assessment will not be detailed, but will provide an initial overview of the scope of storm damages, an inventory of affected properties, and preliminary assessments of the extent of damages to individual structures. Detailed inspections are being sacrificed in an effort to save time in beginning restoration activities and in securing disaster relief from various State and Federal Agencies offering financial assistance.

DAMAGE CLASSIFICATIONS

Structural damages will be classified in the following manner:

Destroyed	if estimated repair costs exceed 75% of assessed value
Major Repairs	if estimated repair costs exceed 30% of assessed value
Minor Repair	if estimated repair costs are less than 30% of assessed value

RECONSTRUCTION DEVELOPMENT STANDARDS

In general, all units requiring major repairs and all new construction shall comply with all development regulations in force at the time repair or new construction is initiated. This shall include compliance with all provisions of the building code governing construction in 100 mph wind velocity zones, all regulations concerning development in designated Special Flood Hazard Areas, and all Health Department Regulations regarding on-site septic systems.

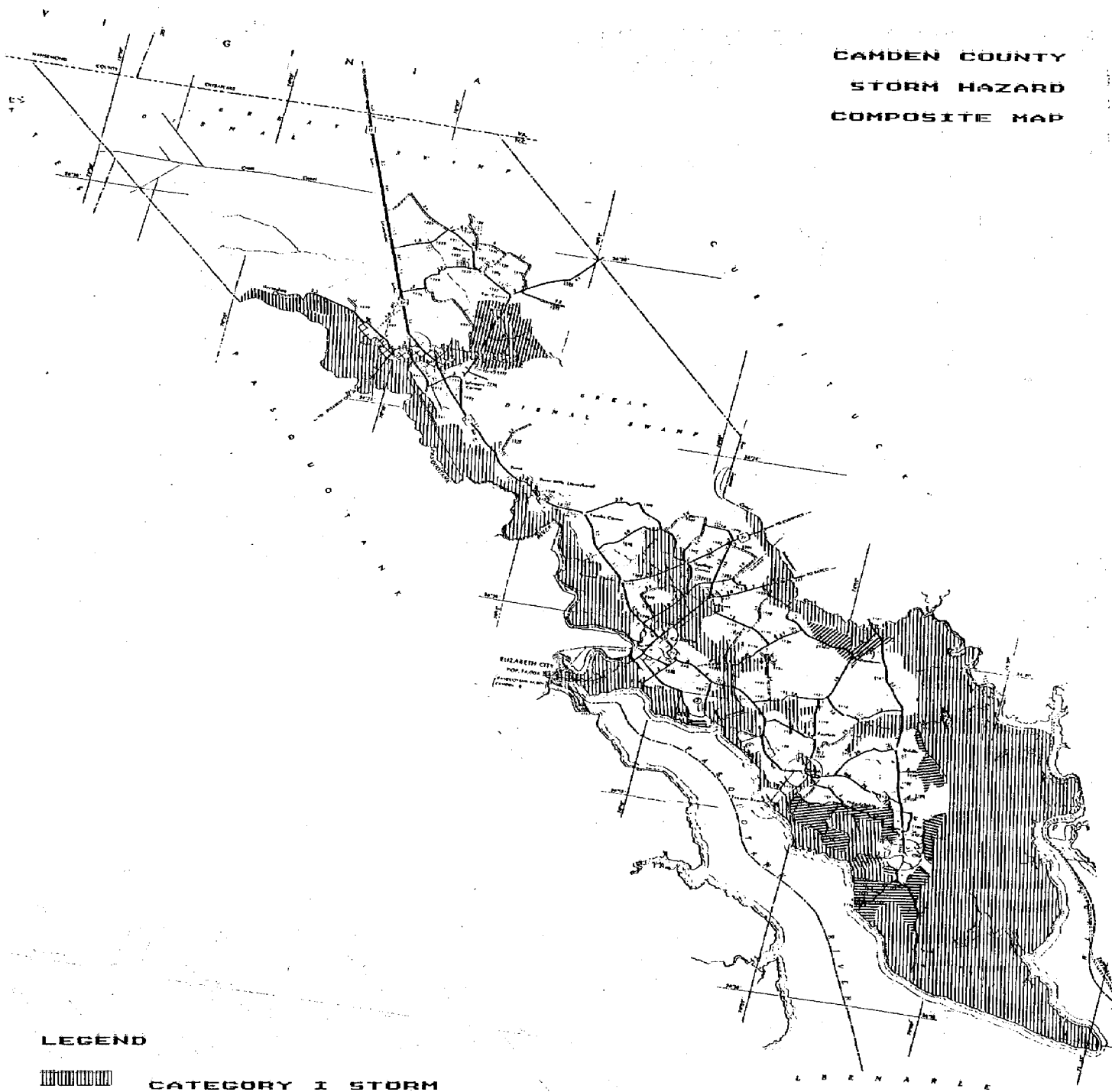
The lone exception to this general rule concerns the application of development restrictions on affected residential lots smaller than one acre (the minimum lot size required by the County Health Department). Where structures on these substandard sized lots have been classified as either "destroyed" or requiring "Major Repair" as a result of the storm damage, the County shall make a determination concerning reconstruction and reuse with or without improvements to the on-site disposal system on a case basis.

DEVELOPMENT MORATORIA

The immediate development moratoria will remain in effect until the assessment reports are completed and the scope and nature of the storm damage has been fully reviewed by the County Commission. The County Commission at that time may rescind or extend the duration of the moratoria based on their assessment of the situation. Such decisions of the Commission may affect all or any portion of the county.

The purpose of the immediate moratoria is basically to relieve the work burden of the support team during the initial phase of the recovery period.

**CAMDEN COUNTY
STORM HAZARD
COMPOSITE MAP**



LEGEND



CATEGORY I STORM



CATEGORY II



CATEGORY III STORM

*** Information taken from The
Division of Emergency Management
Slosh Map**

The preparation of this document was financed in part through a grant provided by the North Carolina Coastal Management Program through funds provided by the Coastal Zone Management Act of 1972 as amended, which is administered by the Office of Ocean and Coastal Resources Management, National Oceanic and Atmospheric Administration.

LAND CLASSIFICATION SYSTEM AND MAP:CAMDEN COUNTY

The land classification system presented here provides the mechanism for implementing the county's development policies according to geographical areas of the county. The Camden County land classification system is based on the standardized CAMA land classification system. Through this system, the local government designates general geographical areas of the county for preferred types of development and for preferred and anticipated levels of growth.

The policy statements and implementation strategies stated in this plan are then applicable to areas of the county containing resources that have been identified for protection or development. The land classification system is not a regulatory instrument, but a general application guide for the county's growth policy.

Land Classification Map

The land classification map provided here gives local governments and the general public a convenient reference for identifying those geographic areas of the county designated for specified types, levels, and patterns of development.

Land Classes

The CAMA land classification system contains five broad development classifications: developed, transitional, community, rural, and conservation. This system emphasizes the timing of development of growth rather than the establishment of severe use restrictions.

Developed:

The statutory purpose of the developed classification is "to provide for continued intensive development of existing cities" [NCAC 15: 7B .0204 (d)(1)(A)].

The regulations also establish specific qualifying densities for this district as well as specific land use characteristics. There are no areas classified as developed in Camden County.

Transition:

The stated purpose of the transition class is "to provide for future intensive urban developments on lands that are suitable and that will be provided with necessary urban services " [NCAC 15: 7B .0204 (d)(2)(A)]. The discussions in the regulations go on to mention that transition areas can be provided with public water and sewer service.

Camden County is designating the causeway area just across the Pasquotank River from Elizabeth City and the Bloodfield Road area in South Mills as the only transitional areas in the county.

Community:

CAMA regulations define the community district as mixed use, low-intensity, clustered development generally associated with rural crossroads communities.

In Camden County, the areas designated as community are all existing crossroads communities that exhibit clustering and all residential subdivisions with 25 or more platted lots.

Permitted uses are regulated by the Camden County Zoning Ordinance.

Rural Service:

The stated purpose of the rural district is "to provide for agricultural, forestry, mineral extraction, and various low-intensity uses on large sites including low density dispersed residential uses."...[NCAC 15: 7B .0204 (d)(4)(A)].

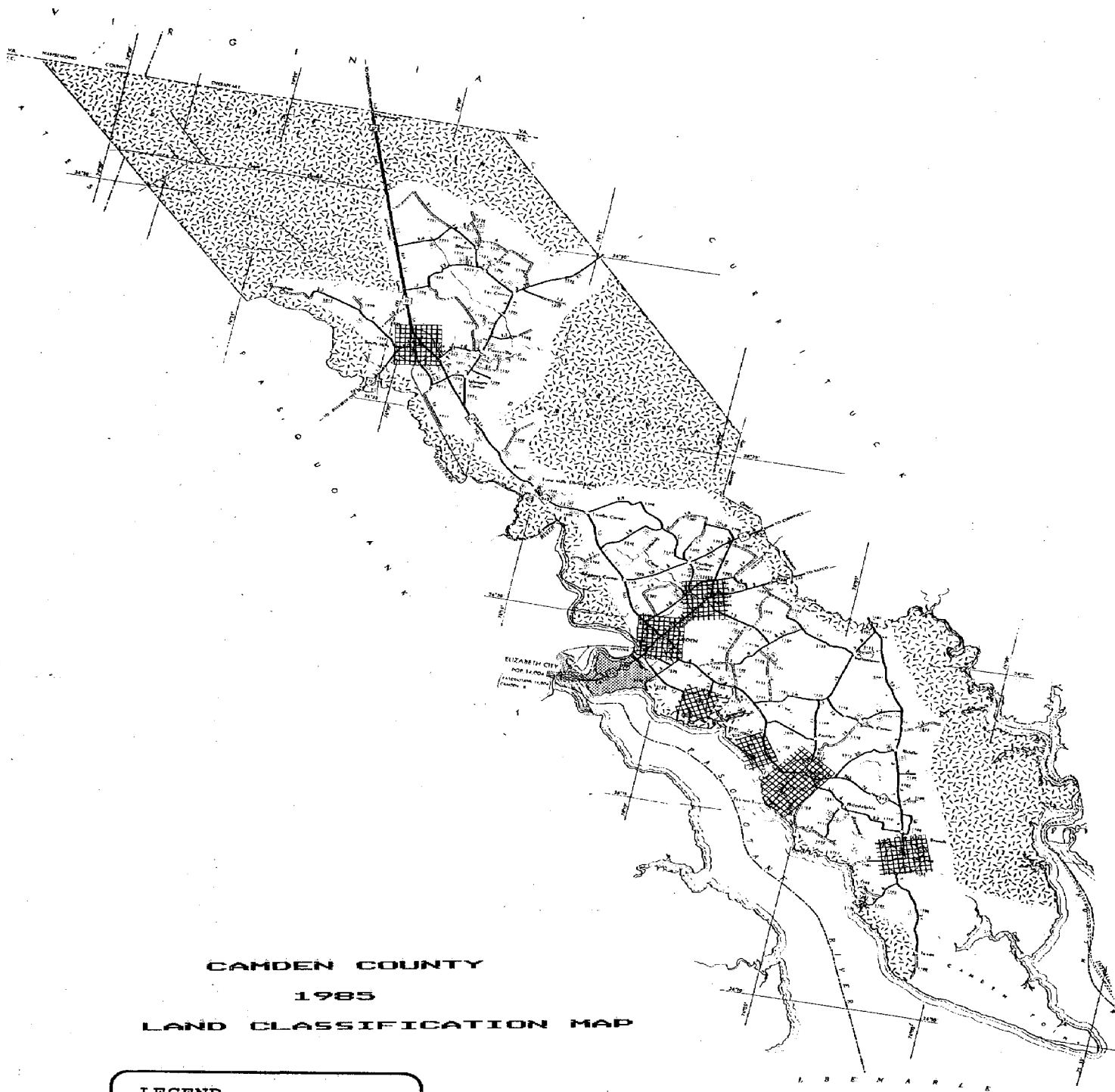
The regulations indicate that development in these areas will use on-site water supplies and waste-water disposal systems. The County is considering negotiations with adjacent local governments to make water available to all areas of the county; therefore the county has created a rural service land classification. This land class covers most areas of the county.

Conservation:





The stated purpose of the conservation class is "to provide for effective long-term management and protection of significant, limited, or irreplaceable areas" [NCAC 15: 7B .0204 (d) (5)(A)].

In Camden County, conservation areas include all areas of environmental concern designated by CAMA, all 404 wetlands, all Storm Hazard Areas identified on the Composite Hazard Map, and all areas below the 100-year flood elevation.

All land uses that can be permitted under the existing regulations of the various state, federal, and local governmental agencies with jurisdiction are allowed in the conservation district.



LEGEND

	TRANSITION
	COMMUNITY
	RURAL SERVICE
	CONSERVATION

The preparation of this document was financed in part through a grant provided by the North Carolina Coastal Management Program through funds provided by the Coastal Zone Management Act of 1972 as amended, which is administered by the Office of Ocean and Coastal Resources Management, National Oceanic and Atmospheric Administration.

RELATIONSHIP BETWEEN LOCAL POLICIES AND LAND CLASSIFICATION

All policies developed during this planning process and formally stated in this document have consistently emphasized the County's intent of relying on existing local development regulations and on the various state and federal agencies with jurisdiction.

The land classification system provided in this document makes no restrictions on land use. Any development is permitted on any site if such development complies with existing local regulations and with the various permit requirements of the state and federal agencies with jurisdiction.

INTER-GOVERNMENTAL COORDINATION

The Land Classification Map in Camden County was established with consideration of the expressed annexation plans of Elizabeth City. The Causeway area in Camden County was Classified as transitional to allow for more urban types of development Near the Elizabeth City City Limits.

APPENDIX 1 SAMPLE QUESTIONNAIRE AND SURVEY SUMMARY

OPINION SURVEY: CAMDEN COUNTY C.A.M.A. LAND USE UPDATE

The following survey is to gather opinions from a sampling of Camden County residents concerning specific land use issues. This survey is totally confidential and we request that you do not sign your name to this document. We do, however, need to know the general location of your residence. Please do not omit your zip code or the township information requested.

OPINION SURVEY

1. In which township do you live? (Circle One)

78 a. Courthouse 74 b. Shiloh 91 c. South Mills

2. What is your zip code?

3. What is your sex, race, age group, and marital status?

178 WHITE 68 BLACK
81 MALE 148 FEMALE
182 MARRIED 20 SINGLE 21 DIVORCED 13 WIDOWED

Age Group (circle One)

4 a. 15-19 108 d. 0-39 6 g. 60-64
9 b. 20-24 43 e. 40-55 19 h. 65-70
47 c. 25-29 2 f. 55-59 13 i. 75+

4. How large is your household?

101 1 person 36 2 persons
129 3 or 4 people 68 5+ persons

5. How long have you lived in Camden County?

42 less than 5 years
39 5-10 years
163 more than 10 years

6. Do you live in a mobile home? 53 yes 193 no

7. Where are you employed?

57 a. Camden County
76 b. Adjacent Counties
45 c. Tidewater
41 d. Unemployed
25 e. Retired

8. Are you self employed? 37 yes 210 no
9. Do you farm? 16 yes 229 no
10. Is farming your primary source of income? 8 supplemental ? 20
11. How many acres do you farm
165 a). none 9 b). 1-100 4 c). 100-300 1 d). 300-500 8 e). 500+
12. Where do you get your drinking water?
77 a. Public water system 162 b. well 9 c. other
13. What type of sewage disposal system do you use?
1 a. Public sewer 232 b. Septic system 15 c. other
14. Have you had any problem with your septic system in the past 5 years?
40 a. yes 205 b. no
15. Has your home site ever been flooded?
24 a. yes 217 b. no
16. Do you carry flood insurance on your home and its contents?
49 a. yes 194 b no
17. What type growth would you like to see occur in Perquimans County?
27 a. residential 5 b. seasonal homes 16 c. commercial
34 d. industrial 22 e. none 3 f. other
18. Where do you do most of your shopping?
20 a. Camden County 174 b. Adjacent counties 33 c. Tidewater area
19. Where do you most often shop for the items listed below?
Choose from one of the following for each item:
A. Camden County
B. Edenton
C. Elizabeth City
D. Virginia
E. Other(Please list)

A	B	C	D	E
7	1	141	62	12
4	0	147	59	10
1	0	180	39	4
2	0	120	10	2
34	0	183	12	1
17	0	173	20	4
15	0	131	57	6
19	0	152	48	1

1. Automobiles
2. Furniture
3. Clothing
4. Building Materials
5. Groceries
6. Heating & Plumbing Equipment
7. Entertainment
8. Dine Out

How would you rank the following answers to the statement:

Improved Economic growth in Camden County can best be accomplished by:

Rank answers from 1 to 5, with 1 being the favored response

1	2	3	4	5
99	48	30	9	33
44	18	40	46	67
34	29	42	49	61
108	57	23	8	20
46	30	50	39	49

- a. Increasing manufacturing employment in the county
- b. Increasing the number of tourists and summer residents in the county
- c. Increasing population growth
- d. Increasing the number of businesses in the county
- e. Increasing farming activities

Which of the following activities will best enable Camden County to achieve economic growth?
Rank answers from 1 to 3

1	2	3
135	43	32
48	72	83
73	66	66

- a. Expand the county's market area
- b. Increase the population in the existing market area
- c. Increase disposable income within the present market area

What is your opinion on the following statements? Choose one of the following for each statement.

- 1. Slightly agree
- 2. Strongly agree
- 3. Slightly disagree
- 4. Strongly disagree

1	2	3	4
52	131	15	19
61	62	49	45
63	134	10	9
51	110	33	22
57	97	36	19
74	92	30	18
39	115	26	34
66	65	33	49

- A. Camden County needs more manufacturing industries.
- B. Tourism and second home development should be promoted.
- C. Camden County should provide additional sites where the public has access to the county's waterways without crossing private property.
- D. Camden County should use code enforcement and other means to eliminate dilapidated and deteriorated housing in the community.
- E. Camden County should provide some means to protect residential areas from the nuisance and hazards of large livestock operations.
- F. Existing livestock operations should be protected from the intrusion of residential subdivision development.
- G. The location, size, and development of mobile home parks should be controlled.
- H. Camden County should adopt zoning regulations.

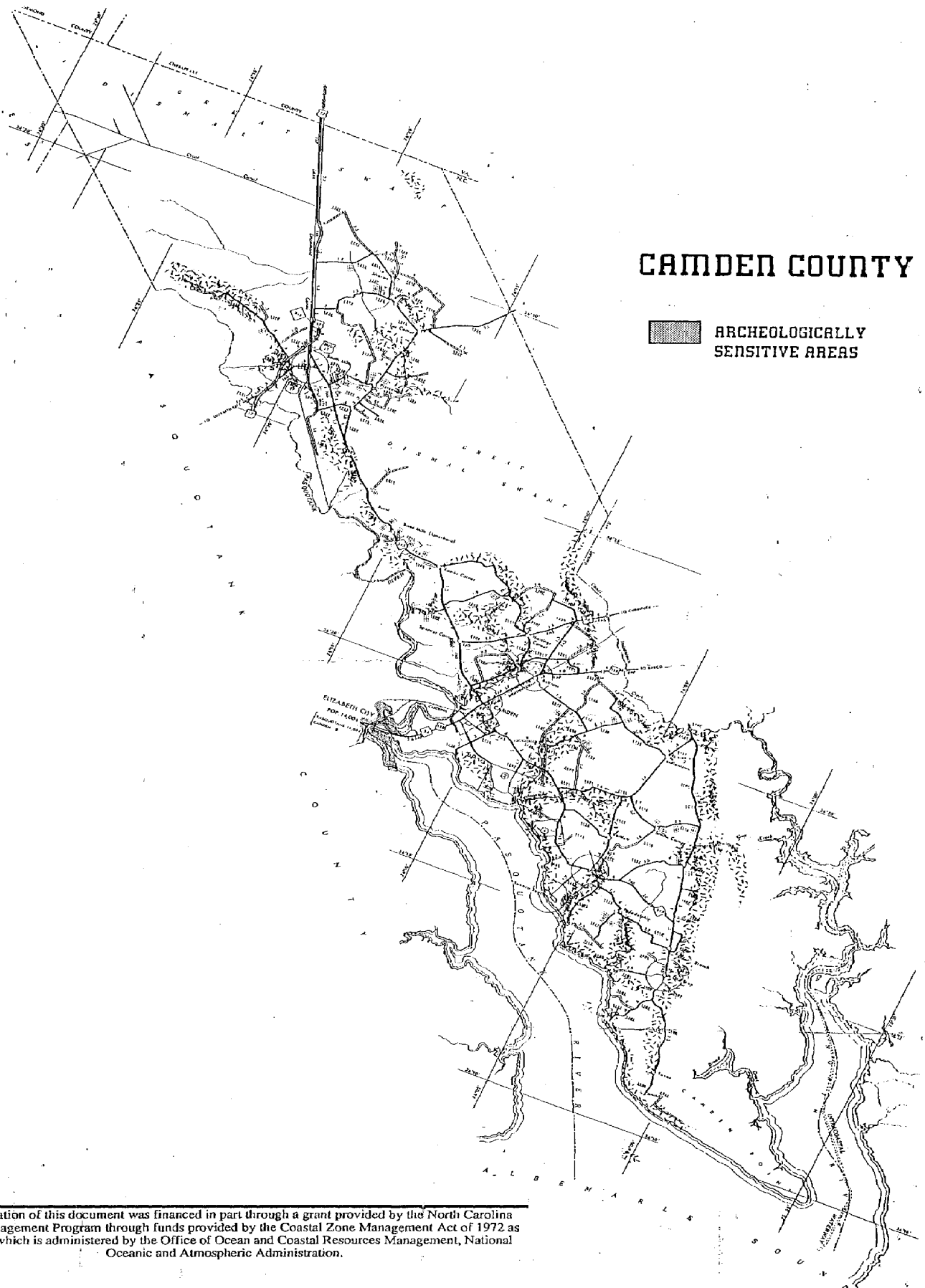
64	84	31	36
----	----	----	----

59	47	53	56
----	----	----	----

59	99	28	29
----	----	----	----

- I. New development in the county should occur near existing populated areas such as Courthouse township, South Mills, and Shiloh.
- J. New development in the county should occur along the shorelines.
- K. New commercial development should be allowed to occur anywhere along Highway 17.

PLEASE FEEL FREE TO MAKE COMMENTS OR TO EXPRESS ANY OF YOUR CONCERNS ABOUT CAMDEN COUNTY.



The preparation of this document was financed in part through a grant provided by the North Carolina Coastal Management Program through funds provided by the Coastal Zone Management Act of 1972 as amended, which is administered by the Office of Ocean and Coastal Resources Management, National Oceanic and Atmospheric Administration.

